TECHNICAL MANUAL

POZIDRIV®
Drive Systems

Includes comprehensive engineering Head Standards, Driver Bit Standards, Gaging Standards, Punch Standards and Formula Data Standards.

PHILLIPS SCREW COMPANY
INNOVATION IN FASTENER TECHNOLOGY

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POZIDRIV®
Drive System Technical Manual

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PHILLIPS SCREW COMPANY
INNOVATION IN FASTENER TECHNOLOGY

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WOOD SCREWS

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS			RECESS DIMENSIONS							DRIVER SIZE
		TO SHARP CORNER	ABS. MIN.				MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE	
		A	B	H	M	T	K	N	MAX	MIN	MIN	
0	3PZ00–4	.119 .105	.099	.035 .026	.069 .056	.044 .028	.012	.018	.037	.021	.016	0
1	3PZ00–5	.146 .130	.123	.043 .033	.077 .064	.052 .036	.012	.018	.045	.029	.024	
2	3PZ10–1	.172 .156	.147	.051 .040	.102 .089	.064 .048	.012	.029	.053	.037	.032	1
3	3PZ10–2	.199 .181	.171	.059 .048	.107 .094	.069 .053	.012	.029	.058	.042	.037	
4	3PZ10–3	.225 .207	.195	.067 .055	.128 .115	.090 .074	.012	.030	.079	.063	.058	
5	3PZ20–1	.252 .232	.220	.075 .062	.154 .141	.087 .069	.015	.041	.071	.053	.048	2
6	3PZ20–2	.279 .257	.244	.083 .069	.174 .161	.107 .089	.015	.041	.091	.073	.068	
7	3PZ20–3	.305 .283	.268	.091 .076	.189 .176	.122 .104	.015	.041	.107	.089	.084	
8	3PZ20–4	.332 .308	.292	.100 .084	.204 .191	.137 .119	.015	.041	.122	.104	.099	
9	3PZ20–5	.358 .334	.316	.108 .091	.214 .201	.148 .130	.015	.042	.132	.114	.109	
10	3PZ30–1	.385 .359	.340	.116 .098	.258 .245	.147 .129	.020	.056	.125	.107	.102	3
12	3PZ30–3	.438 .410	.389	.132 .112	.283 .270	.173 .155	.020	.057	.151	.133	.128	
14	3PZ30–4	.491 .461	.437	.148 .127	.303 .290	.193 .175	.020	.057	.171	.153	.148	
16	3PZ30–5	.544 .512	.485	.164 .141	.328 .315	.218 .200	.020	.057	.196	.178	.173	
18	3PZ40–1	.597 .563	.534	.180 .155	.378 .365	.233 .215	.025	.086	.206	.188	.183	4
20	3PZ40–2	.650 .614	.582	.196 .170	.393 .380	.248 .230	.025	.086	.222	.204	.199	
24	3PZ40–3	.756 .716	.679	.228 .198	.424 .411	.280 .262	.025	.086	.253	.235	.230	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

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TITLE:
POZIDRIV® FLAT HEAD DETAILS

DRAWN	DATE	DRAWING NUMBER
L.A. PROULX	12–16–65	**PZHS-1**
CONFIRMED: L. DOUGAN	DATE 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS			RECESS DIMENSIONS							GAGING		LENGTH (A)		DRIVER SIZE
		TO SHARP CORNER	ABS. MIN.				MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE			MACH. SCREW	TAP SCREW	
		A	B	H	M	T	K	N	MAX	MIN	MIN	G	F			
0	3PZ00–4	.119 .105	.099	.035	.069 .056	.044 .028	.012	.018	.037	.021	.016	.078	.026 .016	1/8	1/8	0
1	3PZ00–5	.146 .130	.123	.043	.077 .064	.052 .036	.012	.018	.045	.029	.024	.101	.028 .016	1/8	5/32	
2	3PZ10–1	.172 .156	.147	.051	.102 .089	.064 .048	.012	.029	.053	.037	.032	.124	.029 .017	1/8	3/16	1
3	3PZ10–2	.199 .181	.171	.059	.107 .094	.069 .053	.012	.029	.058	.042	.037	.148	.031 .018	1/8	7/32	
4	3PZ10–3	.225 .207	.195	.067	.128 .115	.090 .074	.012	.030	.079	.063	.058	.172	.032 .019	3/16	1/4	
5	3PZ20–1	.252 .232	.220	.075	.154 .141	.087 .069	.015	.041	.071	.053	.048	.196	.034 .020	3/16	1/4	2
6	3PZ20–2	.279 .257	.244	.083	.174 .161	.107 .089	.015	.041	.091	.073	.068	.220	.036 .021	3/16	5/16	
7	3PZ20–6	.305 .283	.268	.091	.182 .169	.115 .097	.015	.041	.099	.081	.076	.243	.037 .022	—	3/8	
8	3PZ20–3	.332 .308	.292	.100	.189 .176	.122 .104	.015	.041	.107	.089	.084	.267	.039 .023	1/4	7/16	
10	3PZ20–4	.385 .359	.340	.116	.204 .191	.137 .119	.015	.041	.122	.104	.099	.313	.042 .025	5/16	1/2	
12	3PZ30–2	.438 .410	.389	.132	.268 .255	.157 .139	.020	.056	.136	.118	.113	.362	.045 .027	3/8	9/16	3
1/4	3PZ30–3	.507 .477	.452	.153	.283 .270	.173 .155	.020	.057	.151	.133	.128	.424	.050 .029	7/16	5/8	
5/16	3PZ40–4	.635 .600	.568	.191	.365 .352	.220 .202	.025	.086	.193	.175	.170	.539	.057 .034	1/2	5/8	4
3/8	3PZ40–2	.762 .722	.685	.230	.393 .380	.248 .230	.025	.086	.222	.204	.199	.653	.065 .039	9/16	5/8	
7/16	3PZ40–5	.812 .767	.723	.223	.409 .396	.265 .247	.025	.086	.238	.220	.215	.690	.073 .044	5/8	3/4	
1/2	3PZ40–3	.875 .831	.775	.223	.424 .411	.280 .262	.025	.086	.253	.235	.230	.739	.081 .049	3/4	3/4	
9/16	3PZ40–141	1.000 .950	.889	.260	.447 .434	.303 .285	.025	.087	.276	.258	.253	.851	.089 .053	13/16		
5/8	3PZ50–3	1.125 1.069	1.002	.298	.577 .554	.345 .324	.030	.098	.307	.286	.281	.962	.097 .058	13/16		5
3/4	3PZ50–4	1.375 1.305	1.230	.372	.641 .618	.410 .389	.030	.098	.372	.351	.346	1.186	.112 .067	1-1/8		

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.
NOTE: (A) THESE LENGTHS AND SHORTER ARE UNDERCUT HEAD SCREWS.

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TITLE:

POZIDRIV®
FLAT HEAD DETAILS

DRAWN: R. H. SOMERS	DATE: 12–17–65	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11–7–11	**PZHS-1A** SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

TYPE "A" TAPPING SCREWS

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS			RECESS DIMENSIONS							GAGING		LENGTH (A)	DRIVER SIZE
		TO SHARP CORNER	ABS. MIN.	REF.			MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE				
		A	B	H	M	T	K	N	MAX	MIN	MIN	G	F		
0	3PZ00–4	.119 .105	.099	.035	.069 .056	.044 .028	.012	.018	.037	.021	.016	.078	.026 .016	3/16	0
1	3PZ00–5	.146 .130	.123	.043	.077 .064	.052 .036	.012	.018	.045	.029	.024	.101	.028 .016	3/16	
2	3PZ10–1	.172 .156	.147	.051	.102 .089	.064 .048	.012	.029	.053	.037	.032	.124	.029 .017	3/16	1
3	3PZ10–2	.199 .181	.171	.059	.107 .094	.069 .053	.012	.029	.058	.042	.037	.148	.031 .018	7/32	
4	3PZ10–3	.225 .207	.195	.067	.128 .115	.090 .074	.012	.030	.079	.063	.058	.172	.032 .019	1/4	
5	3PZ20–1	.252 .232	.220	.075	.154 .141	.087 .069	.015	.041	.071	.053	.048	.196	.034 .020	1/4	2
6	3PZ20–2	.279 .257	.244	.083	.174 .161	.107 .089	.015	.041	.091	.073	.068	.220	.036 .021	5/16	
7	3PZ20–6	.305 .283	.268	.091	.182 .169	.115 .097	.015	.041	.099	.081	.076	.243	.037 .022	3/8	
8	3PZ20–3	.332 .308	.292	.100	.189 .176	.122 .104	.015	.041	.107	.089	.084	.267	.039 .023	7/16	
10	3PZ20–4	.385 .359	.340	.116	.204 .191	.137 .119	.015	.041	.122	.104	.099	.313	.042 .025	1/2	
12	3PZ30–2	.438 .410	.389	.132	.268 .255	.157 .139	.020	.056	.136	.118	.113	.362	.045 .027	9/16	3
14	3PZ30–3	.491 .461	.437	.148	.283 .270	.173 .155	.020	.057	.151	.133	.128	.410	.049 .029	5/8	
16	3PZ30–4	.544 .512	.485	.164	.303 .290	.193 .175	.020	.057	.171	.153	.148	.457	.052 .031	3/4	
18	3PZ40–4	.597 .563	.534	.180	.365 .352	.220 .202	.025	.086	.193	.175	.170	.505	.055 .033	13/16	4
20	3PZ40–1	.650 .614	.582	.196	.378 .365	.233 .215	.025	.086	.206	.188	.183	.553	.058 .035	13/16	
24	3PZ40–2	.756 .716	.679	.228	.393 .380	.248 .230	.025	.086	.222	.204	.199	.648	.065 .039	1”	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

NOTE: (A) THESE LENGTHS AND SHORTER ARE UNDERCUT HEAD SCREWS.

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TITLE:

POZIDRIV®
FLAT HEAD DETAILS

DRAWN: R. H. SOMERS	DATE: 12–16–65	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11–7–11	**PZHS-1B** SHEET 1 OF 1

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MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS			RECESS DIMENSIONS							GAGING		LENGTH (A)			DRIVER SIZE
		TO SHARP CORNER	ABS. MIN.				MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE			MACH. SCREW	TAPPING SCREW		
		A	B	H	M	T	K	N	MAX	MIN	MIN	G	F	MAX	MAX	MIN	
0	3PZ00–4	.119 .105	.099	.025 .018	.069 .056	.044 .028	.012	.018	.037	.021	.016	.078	.026 .016	1/8	1/8	3/32	0
1	3PZ00–5	.146 .130	.123	.031 .023	.077 .064	.052 .036	.012	.018	.045	.029	.024	.101	.028 .016	1/8	5/32	1/8	
2	3PZ10–80	.172 .156	.147	.036 .028	.095 .082	.057 .041	.012	.028	.046	.030	.025	.124	.029 .017	1/8	3/16	5/32	1
3	3PZ10–1	.199 .181	.171	.042 .033	.102 .089	.064 .048	.012	.029	.053	.037	.032	.148	.031 .018	1/8	7/32	3/16	
4	3PZ10–54	.225 .207	.195	.047 .038	.117 .104	.079 .063	.012	.029	.068	.052	.047	.172	.032 .019	3/16	1/4	3/16	
5	3PZ10–3	.252 .232	.220	.053 .043	.128 .115	.090 .074	.012	.030	.079	.063	.058	.196	.034 .020	3/16	1/4	3/16	2
6	3PZ20–285	.279 .257	.244	.059 .048	.146 .133	.079 .061	.015	.040	.063	.045	.040	.220	.036 .021	3/16	5/16	1/4	
7	3PZ20–1	.305 .283	.268	.064 .053	.154 .141	.087 .069	.015	.041	.071	.053	.048	.243	.037 .022	—	3/8	1/4	
8	3PZ20–2	.332 .308	.292	.070 .058	.174 .161	.107 .089	.015	.041	.091	.073	.068	.267	.039 .023	1/4	7/16	1/4	
10	3PZ20–3	.385 .359	.340	.081 .068	.189 .176	.122 .104	.015	.041	.107	.089	.084	.313	.042 .025	5/16	1/2	5/16	
12	3PZ30–166	.438 .410	.389	.092 .078	.233 .220	.122 .104	.020	.055	.100	.082	.077	.362	.045 .027	3/8	9/16	3/8	3
1/4	3PZ30–85	.507 .477	.452	.107 .092	.248 .235	.137 .119	.020	.056	.115	.097	.092	.424	.050 .029	7/16	5/8	3/8	
5/16	3PZ40– 260 79	.635 .600	.568	.134 .116	.317 .304	.171 .153	.025	.085	.145	.127	.122	.539	.057 .034	1/2	5/8	7/16	4
3/8	3PZ40–4	.762 .722	.685	.161 .140	.365 .352	.220 .202	.025	.086	.193	.175	.170	.653	.065 .039	9/16	5/8	7/16	
7/16	3PZ40–2	.812 .767	.723	.156 .133	.393 .380	.248 .230	.025	.086	.222	.204	.199	.690	.073 .044	5/8	3/4	5/8	
1/2	3PZ40–5	.875 .831	.775	.156 .130	.409 .396	.265 .247	.025	.086	.238	.220	.215	.739	.081 .049	3/4	3/4	5/8	
9/16	3PZ40–3	1.000 .950	.889	.182 .153	.429 .406	.280 .262	.025	.086	.253	.235	.230	.851	.089 .053	13/16			
5/8	3PZ50–3	1.125 1.069	1.002	.208 .176	.577 .554	.345 .324	.030	.098	.307	.286	.281	.962	.097 .058	15/16			5
3/4	3PZ50–4	1.375 1.305	1.230	.261 .222	.641 .618	.410 .389	.030	.098	.372	.351	.346	1.186	.112 .067	11/8			

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.
NOTE: (A) THESE LENGTHS ARE STANDARD FOR UNDERCUT HEAD SCREWS.

REVISION: PZCN–89 2–2–67; PZCN–96 8–11–67; PZCN–125 10–6–69; PZCN–130 3–2–70

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TITLE:

POZIDRIV®
UNDERCUT FLAT HEAD DETAILS

DRAWN: R. H. SOMERS	DATE: 12–17–65	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11–7–11	**PZHS-1C** SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

TYPE "A" TAPPING SCREWS

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS			RECESS DIMENSIONS							GAGING		LENGTH (A)		DRIVER SIZE
		TO SHARP CORNER	ABS. MIN.				MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE					
		A	B	H	M	T	K	N	MAX	MIN	MIN	G	F	MAX	MIN	
0	3PZ00–4	.119 .105	.099	.025 .018	.069 .056	.044 .028	.012	.018	.037	.021	.016	.078	.026 .016	3/16	7/64	0
1	3PZ00–5	.146 .130	.123	.031 .023	.077 .064	.052 .036	.012	.018	.045	.029	.024	.101	.028 .016	3/16	9/64	
2	3PZ10–80	.172 .156	.147	.036 .028	.095 .082	.057 .041	.012	.028	.046	.030	.025	.124	.029 .017	3/16	11/64	1
3	3PZ10–1	.199 .181	.171	.042 .033	.102 .089	.064 .048	.012	.029	.053	.037	.032	.148	.031 .018	7/32	3/16	
4	3PZ10–54	.225 .207	.195	.047 .038	.117 .104	.079 .063	.012	.029	.068	.052	.047	.172	.032 .019	1/4	7/32	
5	3PZ10–3	.252 .232	.220	.053 .043	.128 .115	.090 .074	.012	.030	.079	.063	.058	.196	.034 .020	1/4	1/4	
6	3PZ20–285	.279 .257	.244	.059 .048	.146 .133	.079 .061	.015	.040	.063	.045	.040	.220	.036 .021	5/16	17/64	2
7	3PZ20–1	.305 .283	.268	.064 .053	.154 .141	.087 .069	.015	.041	.071	.053	.048	.243	.037 .022	3/8	5/16	
8	3PZ20–2	.332 .308	.292	.070 .058	.174 .161	.107 .089	.015	.041	.091	.073	.068	.267	.039 .023	7/16	21/64	
10	3PZ20–3	.385 .359	.340	.081 .068	.189 .176	.122 .104	.015	.041	.107	.089	.084	.313	.042 .025	1/2	3/8	
12	3PZ30–166	.438 .410	.389	.092 .078	.233 .220	.122 .104	.020	.055	.100	.082	.077	.362	.045 .027	9/16	13/32	3
14	3PZ30–85	.491 .461	.437	.104 .088	.248 .235	.137 .119	.020	.056	.115	.097	.092	.410	.049 .029	5/8	15/32	
16	3PZ30–2	.544 .512	.485	.115 .098	.268 .255	.157 .139	.020	.056	.136	.118	.113	.457	.052 .031	3/4	1/2	
18	3PZ40– 260 79	.597 .563	.534	.126 .108	.317 .304	.171 .153	.025	.086	.145	.127	.122	.505	.055 .033	13/16	19/32	4
20	3PZ40–64	.650 .614	.582	.137 .118	.335 .322	.190 .172	.025	.086	.163	.145	.140	.553	.058 .035	13/16	5/8	
24	3PZ40–4	.756 .716	.679	.160 .139	.365 .352	.220 .202	.025	.086	.193	.175	.170	.648	.065 .039	1	3/4	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

NOTE: (A) THESE LENGTHS ARE STANDARD FOR UNDERCUT HEAD SCREWS.

REVISION: PZCN–89 2–3–67; PZCN–101 10–17–67; PZCN–125 10–3–69

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TITLE: **POZIDRIV®**

UNDERCUT FLAT HEAD DETAILS

DRAWN: R. H. SOMERS	DATE: 12–20–65	DRAWING NUMBER **PZHS-1D**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

MACHINE & TAPPING SCREWS

SCREW SIZE and HEAD SIZE	PUNCH NO.	HEAD DIMENSIONS			RECESS DIMENSIONS							DRIVER SIZE
		TO SHARP CORNER	ABS. MIN.				MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE	
		A	B	H	M	T	K	N	MAX	MIN	MIN	
4 WITH 3 HEAD	3PZ10–2	.199 .181	.171	.052	.107 .094	.069 .053	.012	.029	.058	.042	.037	1
5 WITH 4 HEAD	3PZ10–3	.225 .207	.195	.060	.128 .115	.090 .074	.012	.030	.079	.063	.058	
6 WITH 4 HEAD	3PZ10–3	.225 .207	.195	.052	.128 .115	.090 .074	.012	.030	.079	.063	.058	
6 WITH 5 HEAD	3PZ20–1	.252 .232	.220	.068	.154 .141	.087 .069	.015	.041	.071	.053	.048	2
8 WITH 5 HEAD	3PZ20–134	.252 .232	.220	.052	.164 .151	.097 .079	.015	.041	.081	.063	.058	
8 WITH 6 HEAD	3PZ20–6	.279 .257	.244	.069	.182 .169	.115 .097	.015	.041	.099	.081	.076	
10 WITH 8 HEAD	3PZ20–3	.332 .308	.292	.085	.189 .176	.122 .104	.015	.041	.107	.089	.084	
12 WITH 8 HEAD	3PZ20–254	.332 .308	.292	.069	.198 .185	.131 .113	.015	.041	.117	.099	.094	
12 WITH 10 HEAD	3PZ20–4	.385 .359	.340	.101	.204 .191	.137 .119	.015	.041	.122	.104	.099	
1/4 14 WITH 10 HEAD	3PZ20–4	.385 .359	.340	.080	.204 .191	.137 .119	.015	.041	.122	.104	.099	
1/4 14 WITH 12 HEAD	3PZ30–2	.438 .410	.389	.112	.268 .255	.157 .139	.020	.056	.136	.118	.113	3
5/16 WITH 12 HEAD	3PZ30–2	.438 .410	.389	.075	.268 .255	.157 .139	.020	.056	.136	.118	.113	
5/16 WITH 1/4 14 HEAD	3PZ30–3	.507 .477	.452	.116	.283 .270	.173 .155	.020	.057	.151	.133	.128	
3/8 WITH 5/16 HEAD	3PZ40–4	.635 .600	.568	.155	.365 .352	.220 .202	.025	.086	.193	.175	.170	4

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

REVISION	
PZCN–125	10–6–69
PZCN–121	2–28–69
PZCN–89	2–6–67

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TITLE:

POZIDRIV®
FLAT TRIM HEAD DETAILS

DRAWN: R. H. SOMERS	DATE: 12–17–65	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11–7–11	**PZHS-1E** SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

100° FLUSH HEAD MACHINE SCREWS

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS			RECESS DIMENSIONS							GAGING		DRIVER SIZE
		TO SHARP CORNER	ABS. MIN.	REF.			MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE			
		A	B	H	M	T	K	N	MAX	MIN	MIN	G	F	
0	3PZ00–19	.119 .105	.096	.026	.061 .048	.036 .020	.012	.018	.029	.013	.008	.074	.020 .012	0
1	3PZ00–4	.146 .130	.120	.031	.069 .056	.044 .028	.012	.018	.037	.021	.016	.098	.021 .013	
2	3PZ10–80	.172 .136	.143	.037	.095 .082	.057 .041	.012	.028	.046	.030	.025	.121	.022 .014	1
3	3PZ10–1	.199 .181	.167	.043	.102 .089	.064 .048	.012	.029	.053	.037	.032	.144	.024 .015	
4	3PZ10–54	.225 .207	.191	.049	.117 .104	.079 .063	.012	.029	.068	.052	.047	.167	.025 .016	
6	3PZ20–1	.279 .257	.238	.060	.154 .141	.087 .069	.015	.041	.071	.053	.048	.214	.028 .017	2
8	3PZ20–135	.332 .308	.285	.072	.169 .156	.102 .084	.015	.041	.086	.068	.063	.261	.031 .019	
10	3PZ20–136	.385 .359	.333	.083	.184 .171	.117 .099	.015	.041	.101	.083	.078	.307	.034 .021	
1/4	3PZ30–93	.507 .477	.442	.110	.247 .234	.136 .118	.020	.056	.114	.096	.091	.415	.040 .025	3
5/16	3PZ40–$^{260}_{79}$	.635 .600	.556	.138	.317 .304	.171 .153	.025	.085	.145	.127	.122	.526	.047 .030	4
3/8	3PZ40–106	.762 .722	.670	.165	.342 .329	.197 .179	.025	.085	.170	.152	.147	.638	.053 .034	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

REVISION	
PZCN–125	10–6–69
PZCN–89	2–1–67

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TITLE: **POZIDRIV®**

100° FLUSH HEAD MACHINE SCREW

DRAWN: R. H. SOMERS	DATE: 12–17–65	DRAWING NUMBER **PZHS-1F**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

WOOD SCREWS

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS		RECESS DIMENSIONS							DRIVER SIZE
						MAX. RAD.	MIN. WING WIDTH	PENETRATION			
								BEFORE PLATE		AFTER PLATE	
		A	H	M	T	K	N	MAX	MIN	MIN	
0	3PZ00–14	.113 .099	.053 .043	.067 .054	.040 .024	.012	.018	.033	.017	.012	0
1	3PZ00–15	.138 .122	.061 .051	.074 .061	.047 .031	.012	.018	.040	.024	.019	0
2	3PZ10–13	.162 .146	.069 .059	.104 .091	.064 .048	.012	.028	.053	.037	.032	1
3	3PZ10–14	.187 .169	.078 .067	.112 .099	.073 .057	.012	.029	.062	.046	.041	1
4	3PZ10–15	.211 .193	.086 .075	.122 .109	.083 .067	.012	.029	.072	.056	.051	1
5	3PZ20–20	.236 .217	.095 .083	.154 .141	.084 .066	.015	.040	.068	.050	.045	2
6	3PZ20–21	.260 .240	.103 .091	.162 .149	.092 .074	.015	.040	.076	.058	.053	2
7	3PZ20–22	.285 .264	.111 .099	.170 .157	.101 .083	.015	.041	.085	.067	.062	2
8	3PZ20–23	.309 .287	.120 .107	.177 .164	.108 .090	.015	.041	.092	.074	.069	2
9	3PZ20–24	.334 .311	.128 .115	.185 .172	.116 .098	.015	.041	.100	.082	.077	2
10	3PZ20–25	.359 .334	.137 .123	.193 .180	.124 .106	.015	.041	.108	.090	.085	2
12	3PZ30–21	.408 .382	.153 .139	.254 .241	.139 .121	.020	.056	.117	.099	.094	3
14	3PZ30–226	.457 .429	.170 .155	.273 .260	.159 .141	.020	.057	.137	.119	.114	3
16	3PZ30–185	.506 .476	.187 .171	.284 .271	.171 .153	.020	.057	.149	.131	.126	3
18	3PZ40–201	.555 .523	.204 .187	.328 .315	.178 .160	.025	.084	.152	.134	.129	4
20	3PZ40–9	.604 .570	.220 .203	.341 .328	.191 .173	.025	.086	.164	.146	.141	4
24	3PZ40–26	.702 .664	.254 .235	.377 .365	.228 .210	.025	.086	.201	.183	.178	4

NOTE: THIS HEAD STYLE PRODUCED FROM PAN HEAD PUNCHES

REVISION
PZCN–125 10–15–69
PZCN–129 2–24–70

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TITLE:

POZIDRIV®
ROUND HEAD DETAILS

DRAWN: K. NIERMEYER	DATE: 10–16–67	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11–7–11	**PZHS-2**
		SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

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WOOD SCREWS

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS				RECESS DIMENSIONS							DRIVER SIZE
		TO SHARP CORNER	ABS. MIN.					MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE	
		A	B	H	O	M	T	K	N	MAX	MIN	MIN	
0	3PZ00–8	.119 .105	.099	.035 .026	.056 .041	.074 .061	.048 .032	.012	.018	.042	.024	.019	0
1	3PZ00–9	.146 .130	.123	.043 .033	.068 .052	.077 .064	.051 .035	.012	.018	.043	.027	.022	
2	3PZ10–4	.172 .156	.147	.051 .040	.080 .063	.112 .099	.073 .057	.012	.029	.062	.046	.041	1
3	3PZ10–5	.199 .181	.171	.059 .048	.092 .073	.124 .111	.085 .069	.012	.030	.074	.058	.053	
4	3PZ10–6	.225 .207	.195	.067 .055	.104 .084	.136 .123	.097 .081	.012	.030	.086	.070	.065	
5	3PZ20–7	.252 .232	.220	.075 .062	.116 .095	.158 .145	.089 .071	.015	.041	.074	.056	.051	2
6	3PZ20–8	.279 .257	.244	.083 .069	.128 .105	.178 .165	.109 .091	.015	.041	.093	.075	.070	
7	3PZ20–9	.305 .283	.268	.091 .076	.140 .116	.189 .176	.120 .102	.015	.041	.105	.087	.082	
8	3PZ20–10	.332 .308	.292	.100 .084	.152 .126	.205 .192	.137 .119	.015	.041	.121	.103	.098	
9	3PZ20–11	.358 .334	.316	.108 .091	.164 .137	.216 .203	.148 .130	.015	.042	.132	.114	.109	
10	3PZ30–$^{6}_{147}$	.385 .359	.340	.116 .098	.176 .148	.261 .248	.147 .129	.020	.056	.125	.107	.102	3
12	3PZ30–8	.438 .410	.389	.132 .112	.200 .169	.283 .270	.169 .151	.020	.057	.148	.130	.125	
14	3PZ30–9	.491 .461	.437	.148 .127	.224 .190	.305 .292	.192 .174	.020	.057	.170	.152	.147	
16	3PZ30–10	.544 .512	.485	.164 .141	.248 .212	.332 .319	.219 .201	.020	.057	.197	.179	.174	
18	3PZ40–6	.597 .563	.534	.180 .155	.272 .233	.381 .368	.232 .214	.025	.085	.205	.187	.182	4
20	3PZ40–7	.650 .614	.582	.196 .170	.296 .254	.400 .387	.251 .233	.025	.086	.225	.207	.202	
24	3PZ40–8	.756 .716	.679	.228 .198	.344 .297	.436 .423	.288 .270	.025	.087	.261	.243	.238	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

REVISION
PZCN–125 10–7–69
PZCN–102 10–17–67
PZCN–89 2–8–67

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TITLE:

POZIDRIV®
OVAL HEAD DETAILS

DRAWN: R. H. SOMERS	DATE: 12–17–65	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11–7–11	**PZHS-3** SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS				RECESS DIMENSIONS							LENGTH (A)		DRIVER SIZE
		TO SHARP CORNER	ABS. MIN.	REF.				MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE	MACH. SCREW	TAP SCREW	
		A	B	H	O	M	T	K	N	MAX	MIN	MIN			
0	3PZ00–8	.119 .105	.099	.035	.056 .041	.074 .061	.048 .032	.012	.018	.042	.024	.016	1/8	1/8	0
1	3PZ00–9	.146 .130	.123	.043	.068 .052	.077 .064	.051 .035	.012	.018	.043	.027	.022	1/8	5/32	
2	3PZ10–4	.172 .156	.147	.051	.080 .063	.112 .099	.073 .057	.012	.029	.062	.046	.041	1/8	3/16	1
3	3PZ10–5	.199 .181	.171	.059	.092 .073	.124 .111	.085 .069	.012	.030	.074	.058	.053	1/8	7/32	
4	3PZ10–6	.225 .207	.195	.067	.104 .084	.136 .123	.097 .081	.012	.030	.086	.070	.065	3/16	1/4	
5	3PZ20–7	.252 .232	.220	.075	.116 .095	.158 .145	.089 .071	.015	.041	.074	.056	.051	3/16	1/4	2
6	3PZ20–8	.279 .257	.244	.083	.128 .105	.178 .165	.109 .091	.015	.041	.093	.075	.070	3/16	5/16	
7	3PZ20–14	.305 .283	.268	.091	.140 .116	.183 .170	.114 .096	.015	.041	.099	.081	.076	–	3/8	
8	3PZ20–12	.332 .308	.292	.100	.152 .126	.192 .179	.124 .106	.015	.041	.108	.090	.085	1/4	7/16	
10	3PZ20–13	.385 .359	.340	.116	.176 .148	.209 .196	.141 .123	.015	.041	.125	.107	.102	5/16	1/2	
12	3PZ20–11	.438 .410	.389	.132	.200 .169	.270 .257	.157 .139	.020	.056	.135	.117	.112	3/8	9/16	3
1/4	3PZ30–12	.507 .477	.452	.153	.232 .197	.290 .277	.177 .159	.020	.057	.155	.137	.132	7/16	5/8	
5/16	3PZ40–13	.635 .600	.568	.191	.290 .249	.390 .377	.241 .223	.025	.086	.215	.197	.192	1/2	5/8	4
3/8	3PZ40–10	.762 .722	.685	.230	.347 .300	.410 .397	.262 .244	.025	.086	.235	.217	.212	9/16	5/8	
7/16	3PZ40–11	.812 .767	.723	.223	.345 .295	.422 .409	.274 .256	.025	.086	.247	.229	.224	5/8	3/4	
1/2	3PZ40–12	.875 .831	.775	.223	.354 .299	.437 .424	.289 .271	.025	.086	.262	.244	.239	3/4	3/4	
9/16	3PZ40–143	.1000 .950	.889	.260	.410 .350	.462 .439	.311 .293	.025	.087	.285	.267	.262	13/16		
5/8	3PZ50–7	1.125 1.069	1.002	.298	.467 .399	.574 .551	.338 .317	.030	.098	.300	.279	.274	15/16		5
3/4	3PZ50–8	1.375 1.306	1.230	.372	.578 .497	.635 .612	.400 .379	.030	.099	.362	.341	.336	1 1/8		

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.
NOTE: (A) THESE LENGTHS AND SHORTER ARE UNDERCUT HEAD SCREWS.

REVISION
PZCN–130 3–2–70
PZCN–125 10–7–69
PZCN–96 8–11–67
PZCN–89 2–10–67

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TITLE:

POZIDRIV®
OVAL HEAD DETAILS

DRAWN: R. H. SOMERS	DATE: 12–21–65	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11–7–11	**PZHS-3A**
		SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM,, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

TYPE "A" TAPPING SCREWS

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS				RECESS DIMENSIONS							LENGTH (A)	DRIVER SIZE
		TO SHARP CORNER	ABS. MIN.	REF.				MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE		
		A	B	H	O	M	T	K	N	MAX	MIN	MIN		
0	3PZ00–8	.119 .105	.099	.035	.056 .041	.074 .061	.048 .032	.012	.018	.040	.024	.019	3/16	0
1	3PZ00–9	.146 .130	.123	.043	.068 .052	.077 .064	.051 .035	.012	.018	.043	.027	.022	3/16	
2	3PZ10–4	.172 .156	.147	.051	.080 .063	.112 .099	.073 .057	.012	.029	.062	.046	.041	3/16	1
3	3PZ10–5	.199 .181	.171	.059	.092 .073	.124 .111	.085 .069	.012	.030	.074	.058	.053	7/32	
4	3PZ10–6	.225 .207	.195	.067	.104 .084	.136 .123	.097 .081	.012	.030	.086	.070	.065	1/4	
5	3PZ20–7	.252 .232	.220	.075	.116 .095	.158 .145	.089 .071	.015	.041	.074	.056	.051	1/4	2
6	3PZ20–8	.279 .257	.244	.083	.128 .105	.178 .165	.109 .091	.015	.041	.093	.075	.070	5/16	
7	3PZ20–14	.305 .283	.268	.091	.140 .116	.183 .170	.114 .096	.015	.041	.099	.081	.076	3/8	
8	3PZ20–12	.332 .308	.292	.100	.152 .126	.192 .179	.124 .106	.015	.041	.108	.090	.085	7/16	
10	3PZ20–13	.385 .359	.340	.116	.176 .148	.209 .196	.141 .123	.015	.041	.125	.107	.102	1/2	
12	3PZ30–11	.438 .410	.389	.132	.200 .169	.270 .257	.157 .139	.020	.056	.135	.117	.112	9/16	3
14	3PZ30–13	.491 .461	.437	.148	.224 .190	.288 .275	.175 .157	.020	.057	.153	.135	.130	5/8	
16	3PZ30–10	.544 .512	.485	.164	.248 .212	.332 .319	.219 .201	.020	.057	.197	.179	.174	3/4	
18	3PZ40–6	.597 .563	.534	.180	.272 .233	.381 .368	.232 .214	.025	.085	.205	.187	.182	13/16	4
20	3PZ40–7	.650 .614	.582	.196	.296 .254	.400 .387	.251 .233	.025	.086	.225	.207	.202	13/16	
24	3PZ40–8	.756 .716	.679	.228	.344 .297	.436 .323	.288 .270	.025	.087	.261	.243	.238	1"	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

NOTE: (A) THESE LENGTHS AND SHORTER ARE UNDERCUT HEAD SCREWS.

REVISION	
PZCN–125	10–7–69
PZCN–89	2–13–67

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TITLE:

POZIDRIV®
OVAL HEAD DETAILS

DRAWN: R. H. SOMERS	DATE: 12–22–65	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11–7–11	**PZHS-3B** SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS				RECESS DIMENSIONS							LENGTH (A)		DRIVER SIZE
		TO SHARP CORNER	ABS. MIN.	REF.				MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE	MACH. SCREW	TAP SCREW	
		A	B	H	O	M	T	K	N	MAX	MIN	MIN			
0	3PZ00–8	.119 .105	.099	.035	.056 .041	.074 .061	.048 .032	.012	.018	.042	.024	.016	1/8	1/8	0
1	3PZ00–9	.146 .130	.123	.043	.068 .052	.077 .064	.051 .035	.012	.018	.043	.027	.022	1/8	5/32	
2	3PZ10–4	.172 .156	.147	.051	.080 .063	.112 .099	.073 .057	.012	.029	.062	.046	.041	1/8	3/16	1
3	3PZ10–5	.199 .181	.171	.059	.092 .073	.124 .111	.085 .069	.012	.030	.074	.058	.053	1/8	7/32	
4	3PZ10–6	.225 .207	.195	.067	.104 .084	.136 .123	.097 .081	.012	.030	.086	.070	.065	3/16	1/4	
5	3PZ20–7	.252 .232	.220	.075	.116 .095	.158 .145	.089 .071	.015	.041	.074	.056	.051	3/16	1/4	2
6	3PZ20–8	.279 .257	.244	.083	.128 .105	.178 .165	.109 .091	.015	.041	.093	.075	.070	3/16	5/16	
7	3PZ20–14	.305 .283	.268	.091	.140 .116	.183 .170	.114 .096	.015	.041	.099	.081	.076	–	3/8	
8	3PZ20–12	.332 .308	.292	.100	.152 .126	.192 .179	.124 .106	.015	.041	.108	.090	.085	1/4	7/16	
10	3PZ20–13	.385 .359	.340	.116	.176 .148	.209 .196	.141 .123	.015	.041	.125	.107	.102	5/16	1/2	
12	3PZ20–11	.438 .410	.389	.132	.200 .169	.270 .257	.157 .139	.020	.056	.135	.117	.112	3/8	9/16	3
1/4	3PZ30–12	.507 .477	.452	.153	.232 .197	.290 .277	.177 .159	.020	.057	.155	.137	.132	7/16	5/8	
5/16	3PZ40–13	.635 .600	.568	.191	.290 .249	.390 .377	.241 .223	.025	.086	.215	.197	.192	1/2	5/8	4
3/8	3PZ40–10	.762 .722	.685	.230	.347 .300	.410 .397	.262 .244	.025	.086	.235	.217	.212	9/16	5/8	
7/16	3PZ40–11	.812 .767	.723	.223	.345 .295	.422 .409	.274 .256	.025	.086	.247	.229	.224	5/8	3/4	
1/2	3PZ40–12	.875 .831	.775	.223	.354 .299	.437 .424	.289 .271	.025	.086	.262	.244	.239	3/4	3/4	
9/16	3PZ40–143	.1000 .950	.889	.260	.410 .350	.462 .439	.311 .293	.025	.087	.285	.267	.262	13/16		
5/8	3PZ50–7	1.125 1.069	1.002	.298	.467 .399	.574 .551	.338 .317	.030	.098	.300	.279	.274	15/16		5
3/4	3PZ50–8	1.375 1.306	1.230	.372	.578 .497	.635 .612	.400 .379	.030	.099	.362	.341	.336	1 1/8		

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.
NOTE: (A) THESE LENGTHS AND SHORTER ARE UNDERCUT HEAD SCREWS.

REVISION
PZCN–130 3–2–70
PZCN–125 10–7–69
PZCN–96 8–11–67
PZCN–89 2–10–67

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TITLE:

POZIDRIV®
UNDERCUT OVAL HEAD DETAILS

DRAWN:	DATE:	DRAWING NUMBER
L. A. PROULX	2–21–67	**PZHS-3C**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

TYPE "A" TAPPING SCREWS

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS				RECESS DIMENSIONS							LENGTH (A)		DRIVER SIZE
		TO SHARP CORNER	ABS. MIN.	REF.				MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE	MAX	MIN	
		A	B	H	O	M	T	K	N	MAX	MIN	MIN			
0	3PZ00–8	.119 .105	.099	.025	.046 .033	.074 .061	.048 .032	.012	.018	.040	.024	.019	3/16	7/64	0
1	3PZ00–9	.146 .130	.123	.031	.056 .042	.077 .064	.051 .035	.012	.018	.043	.027	.022	3/16	9/64	
2	3PZ10–4	.172 .156	.147	.036	.065 .050	.112 .099	.073 .057	.012	.029	.062	.046	.041	3/16	11/64	1
3	3PZ10–5	.199 .181	.171	.042	.075 .059	.124 .111	.085 .069	.012	.030	.074	.058	.053	7/32	3/16	
4	3PZ10–6	.225 .207	.195	.047	.084 .067	.136 .123	.097 .081	.012	.030	.086	.070	.065	1/4	7/32	
5	3PZ20–7	.252 .232	.220	.053	.094 .076	.158 .145	.089 .071	.015	.041	.074	.056	.051	1/4	1/4	2
6	3PZ20–8	.279 .257	.244	.059	.104 .084	.178 .165	.109 .091	.015	.041	.093	.075	.070	5/16	17/64	
7	3PZ20–14	.305 .283	.268	.064	.113 .093	.183 .170	.114 .096	.015	.041	.099	.081	.076	3/8	5/16	
8	3PZ20–12	.332 .308	.292	.070	.123 .101	.192 .179	.124 .106	.015	.041	.108	.090	.085	7/16	21/64	
10	3PZ20–13	.385 .359	.340	.081	.142 .118	.209 .196	.141 .123	.015	.041	.125	.107	.102	1/2	3/8	
12	3PZ30–11	.438 .410	.389	.092	.161 .135	.270 .257	.157 .139	.020	.056	.135	.117	.112	9/16	13/32	3
14	3PZ30–13	.491 .461	.437	.104	.180 .152	.288 .275	.175 .157	.020	.057	.153	.135	.130	5/8	15/32	
16	3PZ30–142	.544 .512	.485	.115	.199 .169	.307 .294	.194 .176	.020	.057	.172	.154	.149	3/4	1/2	
18	3PZ40–145	.597 .563	.534	.126	.218 .186	.364 .351	.215 .197	.025	.084	.188	.170	.165	13/16	19/32	4
20	3PZ40–13	.650 .614	.582	.137	.238 .203	.390 .377	.241 .223	.025	.086	.215	.197	.192	13/16	5/8	
24	3PZ40–7	.756 .716	.679	.160	.276 .237	.400 .387	.251 .233	.025	.086	.225	.207	.202	1"	3/4	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

NOTE: (A) THESE LENGTHS ARE STANDARD FOR UNDERCUT HEAD SCREWS.

REVISION
PZCN–125 10–7–69
PZCN–103 10–17–67
PZCN–89 2–24–67

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TITLE:

POZIDRIV®
UNDERCUT OVAL HEAD DETAILS

DRAWN: R. H. SOMERS	DATE: 12–27–65	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11–7–11	**PZHS-3D** SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

MACHINE & TAPPING SCREWS

	SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS A MAX	HEAD DIMENSIONS A MIN	HEAD DIMENSIONS REF. H	HEAD DIMENSIONS O	HEAD DIMENSIONS R	RECESS DIMENSIONS M	RECESS DIMENSIONS T	RECESS DIMENSIONS MAX. RAD. K	RECESS DIMENSIONS MIN. WING WIDTH N	RECESS DIMENSIONS (A) PENETRATION BEFORE PLATE MAX	RECESS DIMENSIONS (A) PENETRATION BEFORE PLATE MIN	RECESS DIMENSIONS (A) PENETRATION AFTER PLATE MIN	DRIVER SIZE
	4 WITH 3 HEAD	3PZ10–5	.199	.181	.057	.086 .074	.014	.124 .111	.085 .069	.012	.030	.074	.058	.053	
	5 WITH 4 HEAD	3PZ10–6	.225	.207	.066	.099 .086	.017	.136 .123	.097 .081	.012	.030	.086	.070	.065	1
	6 WITH 4 HEAD	3PZ10–6	.225	.207	.058	.091 .079	.017	.136 .123	.097 .081	.012	.030	.086	.070	.065	
	6 WITH 5 HEAD	3PZ20–7	.252	.232	.075	.112 .098	.019	.158 .145	.089 .071	.015	.041	.074	.056	.051	
(B)	6 WITH 5 HEAD	3PZ20–176	.252	.232	.075	.112 .098	.019	.169 .156	.100 .082	.015	.041	.084	.066	.061	
	8 WITH 5 HEAD	3PZ20–7	.252	.232	.060	.096 .083	.019	.158 .145	.089 .071	.015	.041	.074	.056	.051	
(B)	8 WITH 5 HEAD	3PZ20–176	.252	.232	.060	.096 .083	.019	.169 .156	.100 .082	.015	.041	.084	.066	.061	
	8 WITH 6 HEAD	3PZ20–8	.279	.257	.076	.117 .102	.021	.178 .165	.109 .091	.015	.041	.093	.075	.070	
(B)	8 WITH 6 HEAD	3PZ20–28	.279	.257	.076	.117 .102	.021	.194 .181	.126 .108	.015	.041	.109	.091	.086	
	10 WITH 8 HEAD	3PZ20–12	.332	.308	.094	.141 .124	.025	.192 .179	.124 .106	.015	.041	.108	.090	.085	
(B)	10 WITH 8 HEAD	3PZ20–255	.332	.308	.094	.141 .124	.025	.207 .194	.139 .121	.015	.041	.122	.104	.099	
	12 WITH 8 HEAD	3PZ20–12	.332	.308	.078	.125 .109	.025	.192 .179	.124 .106	.015	.041	.108	.090	.085	
(B)	12 WITH 8 HEAD	3PZ20–255	.332	.308	.078	.125 .109	.025	.207 .194	.139 .121	.015	.041	.122	.104	.099	2
	12 WITH 10 HEAD	3PZ20–13	.385	.359	.111	.166 .148	.029	.209 .196	.141 .123	.015	.041	.125	.107	.102	
(B)	12 WITH 10 HEAD	3PZ20–256	.385	.359	.111	.166 .148	.029	.220 .207	.141 .123	.015	.041	.136	.118	.113	
	1/4 & 14 WITH 10 HEAD	3PZ20–13	.385	.359	.091	.146 .129	.029	.209 .196	.141 .123	.015	.041	.125	.107	.102	
(B)	1/4 & 14 WITH 10 HEAD	3PZ20–256	.385	.359	.091	.146 .129	.029	.220 .207	.152 .134	.015	.041	.136	.118	.113	
	1/4 & 14 WITH 12 HEAD	3PZ30–11	.438	.410	.124	.187 .167	.033	.270 .257	.157 .139	.020	.056	.135	.117	.112	
	5/16 WITH 12 HEAD	3PZ30–11	.438	.410	.087	.150 .131	.033	.270 .257	.157 .139	.020	.056	.135	.117	.112	3
	5/16 WITH 1/4 HEAD	3PZ30–12	.507	.477	.130	.202 .181	.038	.290 .277	.177 .159	.020	.057	.155	.137	.132	
	3/8 WITH 5/16 HEAD	3PZ40–13	.635	.600	.173	.265 .240	.048	.390 .377	.241 .223	.025	.086	.215	.197	.192	4

NOTE: (A) RECESS PENTRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.
(B) THESE PUNCHES USED FOR SCREWS WITH SHOULDER.
(C) SHOULDER FOR M.S. OVER 1 1/2 AND TAPPING SCREWS OVER 1" ON SIZES #4 THRU #12 AND OVER 2" ON SIZE 1/4 OR # 14.

REVISION PZCN–125 10–7–69

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TITLE:

POZIDRIV®
OVAL TRIM HEAD DETAILS

DRAWN: L. A. PROULX	DATE: 1–21–66	DRAWING NUMBER **PZHS-3E**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.		HEAD DIMENSIONS			RECESS DIMENSIONS							DRIVER SIZE
								MAX. RAD.	MIN. WING WIDTH	PENETRATION			
										BEFORE PLATE		AFTER PLATE	
	FINISHED	SHAVED	A	H	O	M	T	K	N	MAX	MIN	MIN	
0	3PZ00–20	3PZ00–14	.096 .083	.045 .037	.059 .043	.067 .054	.040 .024	.012	.018	.033	.017	.012	0
1	3PZ00–21	3PZ00–15	.118 .104	.053 .045	.071 .055	.074 .061	.047 .031	.012	.018	.040	.024	.019	
2	3PZ10–35	3PZ10–13	.140 .124	.062 .053	.083 .066	.104 .091	.064 .048	.012	.028	.053	.037	.032	1
3	3PZ10–37	3PZ10–14	.161 .145	.070 .061	.095 .077	.112 .099	.073 .057	.012	.029	.062	.046	.041	
4	3PZ10–36	3PZ10–15	.183 .166	.079 .069	.107 .088	.122 .109	.083 .067	.012	.029	.072	.056	.051	
5	3PZ20–265	3PZ20–346	.205 .187	.088 .078	.120 .100	.140 .127	.070 .052	.015	.040	.054	.036	.031	2
6	3PZ20–257	3PZ20–21	.226 .208	.096 .086	.132 .111	.162 .149	.092 .074	.015	.040	.076	.058	.053	
7	3PZ20–278	3PZ20–22	.248 .229	.105 .094	.144 .122	.170 .157	.101 .083	.015	.041	.085	.067	.062	
8	3PZ20–266	3PZ20–23	.270 .250	.113 .102	.156 .133	.177 .164	.108 .090	.015	.041	.092	.074	.069	
10	3PZ20–258	3PZ20–25	.313 .292	.130 .118	.180 .156	.193 .180	.124 .106	.015	.041	.108	.090	.085	
12	3PZ30–68	3PZ30–21	.357 .334	.148 .134	.205 .178	.254 .241	.139 .121	.020	.056	.117	.099	.094	3
1/4	3PZ30–67	3PZ30–22	.414 .389	.170 .155	.237 .207	.273 .260	.159 .141	.020	.057	.137	.119	.114	
5/16	3PZ30–69	3PZ30–140	.518 .490	.211 .194	.295 .262	.315 .302	.202 .184	.020	.057	.181	.163	.158	
3/8	3PZ40–162	3PZ40–26	.622 .590	.253 .233	.355 .315	.377 .364	.228 .210	.025	.086	.201	.183	.178	4
7/16	3PZ40–163	3PZ40–27	.625 .589	.265 .242	.368 .321	.399 .386	.251 .233	.025	.086	.224	.206	.201	
1/2	3PZ40–164	3PZ40–28	.750 .710	.297 .273	.412 .362	.420 .407	.273 .255	.025	.086	.246	.228	.223	
9/16	3PZ40–142	3PZ40–281	.812 .768	.336 .308	.466 .410	.456 .433	.304 .286	.025	.087	.277	.259	.254	
5/8	3PZ50–5	3PZ50–15	.875 .827	.375 .345	.521 .461	.570 .547	.333 .312	.030	.098	.295	.274	.269	5
3/4	3PZ40–6	3PZ50–16	1.000 .945	.441 .406	.612 .542	.614 .591	.379 .358	.030	.098	.341	.320	.315	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

REVISION
PZCN–125 10–14–69
PZCN–130 3–2–70

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TITLE: **POZIDRIV® FINISHED & SHAVED FILLISTER HEAD DETAILS**

DRAWN: L. A. PROULX	DATE: 2–24–67	DRAWING NUMBER **PZHS-4**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

TYPE "A" TAPPING SCREWS

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS			RECESS DIMENSIONS							DRIVER SIZE
							MAX. RAD.	MIN. WING WIDTH	PENETRATION			
									BEFORE PLATE		AFTER PLATE	
		A	H	O	M	T	K	N	MAX	MIN	MIN	
0	3PZ00–20	.096 .083	.045 .037	.059 .043	.067 .054	.040 .024	.012	.018	.033	.017	.012	0
1	3PZ00–21	.118 .104	.053 .045	.071 .055	.074 .061	.047 .031	.012	.018	.040	.024	.019	
2	3PZ10–35	.140 .124	.062 .053	.083 .066	.104 .091	.064 .048	.012	.028	.053	.037	.032	1
3	3PZ10–37	.161 .145	.070 .061	.095 .077	.112 .099	.073 .057	.012	.029	.062	.046	.041	
4	3PZ10–36	.183 .166	.079 .069	.107 .088	.122 .109	.083 .067	.012	.029	.072	.056	.051	
5	3PZ20–265	.205 .187	.088 .078	.120 .100	.140 .127	.070 .052	.015	.040	.054	.036	.031	2
6	3PZ20–257	.226 .208	.096 .086	.132 .111	.162 .149	.092 .074	.015	.040	.076	.058	.053	
7	3PZ20–278	.248 .229	.105 .094	.144 .122	.170 .157	.101 .083	.015	.041	.085	.067	.062	
8	3PZ20–266	.270 .250	.113 .102	.156 .133	.177 .164	.108 .090	.015	.041	.092	.074	.069	
10	3PZ20–258	.313 .292	.130 .118	.180 .156	.193 .180	.124 .106	.015	.041	.108	.090	.085	
12	3PZ30–68	.357 .334	.148 .134	.205 .178	.254 .241	.139 .121	.020	.056	.117	.099	.094	3
14	3PZ30–67	.400 .376	.165 .151	.230 .201	.273 .260	.159 .141	.020	.057	.137	.119	.114	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

REVISION
PZCN–89 2–27–67
PZCN–125 10–14–69

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TITLE: **POZIDRIV® FINISHED FILLISTER HEAD DETAILS**

DRAWN: R. H. SOMERS	DATE: 12–29–65	DRAWING NUMBER **PZHS-4A**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS			RECESS DIMENSIONS							DRIVER SIZE
							MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE	
		A	F	R	M	T	K	N	MAX	MIN	MIN	
0	3PZ00–14	.116 .104	.044 .036	.005	.067 .054	.040 .024	.012	.018	.033	.017	.012	0
1	3PZ00–15	.142 .130	.053 .044	.005	.074 .061	.047 .031	.012	.018	.040	.024	.019	
2	3PZ10–13	.167 .155	.062 .053	.010	.104 .091	.064 .048	.012	.028	.053	.037	.032	1
3	3PZ10–14	.193 .180	.071 .062	.010	.112 .099	.073 .057	.012	.029	.062	.046	.041	
4	3PZ10–15	.219 .205	.080 .070	.010	.122 .109	.083 .067	.012	.029	.072	.056	.051	
5	3PZ20–20	.245 .231	.089 .079	.015	.154 .141	.084 .066	.015	.040	.068	.050	.045	2
6	3PZ20–21	.270 .256	.097 .087	.015	.162 .149	.092 .074	.015	.040	.076	.058	.053	
7	3PZ20–22	.296 .281	.106 .096	.015	.170 .157	.101 .083	.015	.041	.085	.067	.062	
8	3PZ20–23	.322 .306	.115 .105	.015	.177 .164	.108 .090	.015	.041	.092	.074	.069	
10	3PZ20–25	.373 .357	.133 .122	.020	.193 .180	.124 .106	.015	.041	.108	.090	.085	
12	3PZ30–21	.425 .407	.151 .139	.025	.254 .241	.139 .121	.020	.056	.117	.099	.094	3
1/4	3PZ30–22	.492 .473	.175 .162	.035	.273 .260	.159 .141	.020	.057	.137	.119	.114	
5/16	3PZ40–9	.615 .594	.218 .203	.040	.341 .328	.191 .173	.025	.086	.164	.146	.141	4
3/8	3PZ40–26	.740 .716	.261 .244	.040	.377 .364	.228 .210	.025	.086	.201	.183	.178	
7/16	3PZ40–27	.863 .837	.304 .286	–	.399 .386	.251 .233	.025	.086	.224	.206	.201	
1/2	3PZ40–28	.987 .958	.348 .327	–	.420 .407	.273 .255	.025	.086	.246	.228	.223	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

REVISION
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TITLE:

POZIDRIV®
PAN HEAD DETAILS

DRAWN: R. H. SOMERS	DATE: 12–30–65	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11–7–11	**PZHS-5** SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

TYPE "A" TAPPING SCREWS

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS			RECESS DIMENSIONS							DRIVER SIZE
							MAX. RAD.	MIN. WING WIDTH	PENETRATION			
									BEFORE PLATE		AFTER PLATE	
		A	F	R	M	T	K	N	MAX	MIN	MIN	
0	3PZ00–14	.116 .104	.044 .036	.005	.067 .054	.040 .024	.012	.018	.033	.017	.012	0
1	3PZ00–15	.142 .130	.053 .044	.005	.074 .061	.047 .031	.012	.018	.040	.024	.019	
2	3PZ10–13	.167 .155	.062 .053	.010	.104 .091	.064 .048	.012	.028	.053	.037	.032	1
3	3PZ10–14	.193 .180	.071 .062	.010	.112 .099	.073 .057	.012	.029	.062	.046	.041	
4	3PZ10–15	.219 .205	.080 .070	.010	.122 .109	.083 .067	.012	.029	.072	.056	.051	
5	3PZ20–20	.245 .231	.089 .079	.015	.154 .141	.084 .066	.015	.040	.068	.050	.045	2
6	3PZ20–21	.270 .256	.097 .087	.015	.162 .149	.092 .074	.015	.040	.076	.058	.053	
7	3PZ20–22	.296 .281	.106 .096	.015	.170 .157	.101 .083	.015	.041	.085	.067	.062	
8	3PZ20–23	.322 .306	.115 .105	.015	.177 .164	.108 .090	.015	.041	.092	.074	.069	
10	3PZ20–25	.373 .357	.133 .122	.020	.193 .180	.124 .106	.015	.041	.108	.090	.085	
12	3PZ30–21	.425 .407	.151 .139	.025	.254 .241	.139 .121	.020	.056	.117	.099	.094	3
14	3PZ30–226	.476 .457	.169 .156	.035	.273 .260	.159 .141	.020	.057	.137	.119	.114	
16	3PZ30–185	.528 .508	.187 .173	.035	.284 .271	.171 .153	.020	.057	.149	.131	.126	
18	3PZ40–201	.579 .558	.205 .191	.035	.328 .315	.178 .160	.025	.084	.152	.134	.129	4
20	3PZ40–9	.631 .608	.223 .208	.040	.341 .328	.191 .173	.025	.086	.164	.146	.141	
24	3PZ40–26	.734 .709	.259 .242	.040	.377 .364	.228 .210	.025	.086	.201	.183	.178	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

REVISION	
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PZCN–96	5–8–67
PZCN–89	2–28–67

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TITLE:

POZIDRIV®
PAN HEAD DETAILS

DRAWN: L. A. PROULX	DATE: 1–4–66	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11–7–11	**PZHS-5A** SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

WOOD SCREWS

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS		RECESS DIMENSIONS							DRIVER SIZE
						MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE	
		A	F	M	T	K	N	MAX	MIN	MIN	
0	3PZ00–14	.116 .104	.044 .036	.067 .054	.040 .024	.012	.018	.033	.017	.012	0
1	3PZ00–15	.142 .130	.053 .044	.074 .061	.047 .031	.012	.018	.040	.024	.019	
2	3PZ10–13	.167 .155	.062 .053	.104 .091	.064 .048	.012	.028	.053	.037	.032	1
3	3PZ10–14	.193 .180	.071 .062	.112 .099	.073 .057	.012	.029	.062	.046	.041	
4	3PZ10–15	.219 .205	.080 .070	.122 .109	.083 .067	.012	.029	.072	.056	.051	
5	3PZ20–20	.245 .231	.089 .079	.154 .141	.084 .066	.015	.040	.068	.050	.045	2
6	3PZ20–21	.270 .256	.097 .087	.162 .149	.092 .074	.015	.040	.076	.058	.053	
7	3PZ20–22	.296 .281	.106 .096	.170 .157	.101 .083	.015	.041	.085	.067	.062	
8	3PZ20–23	.322 .306	.115 .105	.177 .164	.108 .090	.015	.041	.092	.074	.069	
9	3PZ20–24	.347 .331	.124 .113	.185 .172	.116 .098	.015	.041	.100	.082	.077	
10	3PZ20–25	.373 .357	.133 .122	.193 .180	.124 .106	.015	.041	.108	.090	.085	
12	3PZ30–21	.425 .407	.151 .139	.254 .241	.139 .121	.020	.056	.117	.099	.094	
14	3PZ30–22	.476 .457	.169 .156	.273 .260	.159 .141	.020	.057	.137	.119	.114	3
16	3PZ30–185	.528 .508	.187 .173	.284 .271	.171 .153	.020	.057	.149	.131	.126	
18	3PZ40–201	.579 .558	.205 .191	.328 .315	.178 .160	.025	.084	.152	.134	.129	
20	3PZ40–9	.631 .608	.223 .208	.341 .328	.191 .173	.025	.086	.164	.146	.141	4
24	3PZ40–26	.734 .709	.259 .242	.377 .364	.228 .210	.025	.086	.201	.183	.178	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

REVISION
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TITLE: **POZIDRIV® PAN HEAD DETAILS**

DRAWN: R. H. SOMERS	DATE: 12–30–65	DRAWING NUMBER **PZHS-5B**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS		SLOT DIMENSIONS				RECESS DIMENSIONS							DRIVER SIZE
				W		D				MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE	
		A	F	MAX	MIN	MAX	MIN	M	T	K	N	MAX	MIN	MIN	
0	3PZ00–22	.116 .104	.044 .036	.023	.016	.022	.014	.067 .054	.040 .024	.012	.018	.033	.017	.012	0
1	3PZ00–23	.142 .130	.053 .044	.026	.019	.027	.018	.074 .061	.047 .031	.012	.018	.040	.024	.019	
2	3PZ10–154	.167 .155	.062 .053	.031	.023	.031	.022	.104 .091	.064 .048	.012	.028	.053	.037	.032	1
3	3PZ10–155	.193 .180	.071 .062	.035	.027	.036	.026	.112 .099	.073 .057	.012	.029	.062	.046	.041	
4	3PZ10–156	.219 .205	.080 .070	.039	.031	.040	.030	.122 .109	.083 .067	.012	.029	.072	.056	.051	
5	3PZ20–551	.245 .231	.089 .079	.043	.035	.045	.034	.154 .141	.084 .066	.015	.040	.068	.050	.045	2
6	3PZ20–552	.270 .256	.097 .087	.048	.039	.050	.037	.162 .149	.092 .074	.015	.040	.076	.058	.053	
7	3PZ20–553	.296 .281	.106 .096	.048	.039	.054	.041	.170 .157	.101 .083	.015	.041	.085	.067	.062	
8	3PZ20–554	.322 .306	.115 .105	.054	.045	.058	.045	.177 .164	.108 .090	.015	.041	.092	.074	.069	
10	3PZ20–555	.373 .357	.133 .122	.060	.050	.068	.053	.193 .180	.124 .106	.015	.041	.108	.090	.085	
12	3PZ30–236	.425 .407	.151 .139	.067	.056	.077	.061	.254 .241	.139 .121	.020	.056	.117	.099	.094	3
1/4	3PZ30–237	.492 .473	.175 .162	.075	.064	.087	.070	.273 .260	.159 .141	.020	.057	.137	.119	.114	
5/16	3PZ40–267	.615 .594	.218 .203	.084	.072	.106	.085	.341 .328	.191 .173	.025	.086	.164	.146	.141	4
3/8		.740 .716	.261 .244					.377 .364	.228 .210	.025	.086	.201	.183	.178	
7/16		.863 .838	.304 .286					.399 .386	.251 .233	.025	.086	.224	.206	.201	
1/2		.987 .958	.348 .327					.420 .407	.273 .255	.025	.086	.246	.228	.223	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

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TITLE: **COMBINATION POZIDRIV®-SLOTTED PAN HEAD DETAILS**

DRAWN: R. H. SOMERS	DATE: 2–3–65	DRAWING NUMBER **PZHS-5C**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

TAPPING SCREWS TYPE "A"

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS		SLOT DIMENSIONS				RECESS DIMENSIONS							DRIVER SIZE
				W		D				MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE	
		A	F	MAX	MIN	MAX	MIN	M	T	K	N	MAX	MIN	MIN	
0	3PZ00–22	.116 .104	.044 .036	.023	.016	.022	.014	.067 .054	.040 .024	.012	.018	.033	.017	.012	0
1	3PZ00–23	.142 .130	.053 .044	.026	.019	.027	.018	.074 .061	.047 .031	.012	.018	.040	.024	.019	
2	3PZ10–154	.167 .155	.062 .053	.031	.023	.031	.022	.104 .094	.064 .048	.012	.028	.053	.037	.032	1
3	3PZ10–155	.193 .180	.071 .062	.035	.027	.036	.026	.112 .099	.073 .057	.012	.029	.062	.046	.041	
4	3PZ10–156	.219 .205	.080 .070	.039	.031	.040	.030	.122 .109	.083 .067	.012	.029	.072	.056	.051	
5	3PZ20–551	.245 .231	.088 .079	.043	.035	.045	.034	.154 .141	.084 .066	.015	.040	.068	.050	.045	2
6	3PZ20–552	.270 .256	.097 .087	.048	.039	.050	.037	.162 .149	.092 .074	.015	.040	.076	.058	.053	
7	3PZ20–553	.296 .281	.106 .096	.048	.039	.054	.041	.170 .157	.101 .083	.015	.041	.085	.067	.062	
8	3PZ20–554	.322 .306	.115 .105	.054	.045	.058	.045	.177 .164	.108 .090	.015	.041	.092	.074	.069	
10	3PZ20–555	.373 .357	.133 .122	.060	.050	.068	.053	.193 .180	.124 .106	.015	.041	.108	.090	.085	
12	3PZ30–236	.425 .407	.151 .139	.067	.056	.077	.061	.254 .241	.139 .121	.020	.056	.117	.099	.094	3
14	3PZ30–249	.476 .457	.169 .156	.075	.064	.085	.068	.273 .260	.159 .141	.020	.057	.137	.119	.114	
16	3PZ40–247	.528 .508	.187 .173	.074	.064	.093	.070	.284 .271	.171 .153	.020	.057	.149	.131	.126	
18	3PZ40–276	.579 .558	.205 .191	.084	.072	.100	.080	.328 .315	.178 .160	.025	.084	.152	.134	.129	4
20	3PZ40–277	.631 .608	.223 .208	.084	.072	.108	.087	.341 .328	.191 .173	.025	.086	.164	.146	.141	
24	3PZ40–278	.754 .709	.259 .242	.094	.081	.123	.100	.377 .364	.228 .210	.025	.086	.201	.183	.178	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

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TITLE: **COMBINATION POZIDRIV®-SLOTTED PAN HEAD DETAILS**

DRAWN: L. W. WHITE	DATE: 11–2–65	DRAWING NUMBER **PZHS-5D**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS		RECESS DIMENSIONS							DRIVER SIZE
						MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE	
		A	H	M	T	K	N	MAX	MIN	MIN	
0	3PZ00–16	.131 .119	.037 .029	.062 .049	.037 .021	.012	.018	.030	.014	.009	0
1	3PZ00–17	.164 .149	.045 .037	.070 .057	.045 .029	.012	.018	.038	.022	.017	
2	3PZ10–100	.194 .180	.053 .044	.098 .085	.060 .044	.012	.029	.049	.033	.028	1
3	3PZ10–101	.226 .211	.061 .051	.105 .092	.067 .049	.012	.029	.056	.040	.035	
4	3PZ10–102	.257 .241	.069 .059	.108 .095	.070 .054	.012	.029	.059	.043	.038	
5	3PZ10–103	.289 .272	.078 .066	.124 .111	.086 .068	.012	.030	.075	.059	.054	
6	3PZ20–321/338	.321 .303	.086 .074	.148 .135	.081 .063	.015	.041	.065	.047	.042	2
7	3PZ20–322	.352 .333	.094 .081	.155 .142	.088 .070	.015	.041	.072	.054	.049	
8	3PZ20–323	.384 .364	.102 .088	.162 .149	.095 .077	.015	.041	.079	.061	.056	
10	3PZ20–324/339	.448 .425	.118 .103	.178 .165	.111 .093	.015	.042	.095	.077	.072	
12	3PZ30–167	.511 .487	.134 .118	.234 .221	.123 .105	.020	.055	.101	.083	.078	3
1/4	3PZ30–168/180	.573 .546	.150 .133	.248 .235	.137 .119	.020	.056	.115	.097	.092	
5/16	3PZ40–172/189	.698 .666	.183 .162	.333 .320	.187 .169	.025	.086	.161	.143	.138	4
3/8	3PZ40–173	.823 .787	.215 .191	.364 .351	.219 .201	.025	.086	.192	.174	.169	
7/16	3PZ40–174	.948 .907	.248 .221	.394 .381	.249 .231	.025	.086	.223	.205	.200	
1/2	3PZ40–175	1.073 1.028	.280 .250	.422 .409	.278 .260	.025	.086	.251	.233	.228	
9/16	3PZ40–329	1.198 1.149	.312 .279	.432 .409	.283 .265	.025	.086	.256	.238	.233	
5/8	3PZ50–17	1.323 1.269	.345 .309	.536 .513	.304 .283	.030	.097	.266	.245	.240	5
3/4	3PZ50–18	1.573 1.511	.410 .368	.593 .570	.362 .341	.030	.098	.323	.302	.297	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

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TITLE: **POZIDRIV® FLAT TOP TRUSS HEAD DETAILS**

DRAWN: L. A. PROULX	DATE: 3–10–67	DRAWING NUMBER **PZHS-6B**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

TYPE "A" TAPPING SCREWS

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS		RECESS DIMENSIONS							DRIVER SIZE
						MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE	
		A	H	M	T	K	N	MAX	MIN	MIN	
0	3PZ00–16	.131 .119	.037 .029	.062 .049	.037 .021	.012	.018	.030	.014	.009	0
1	3PZ00–17	.164 .149	.045 .037	.070 .057	.045 .029	.012	.018	.038	.022	.017	
2	3PZ10–100	.194 .180	.053 .044	.098 .085	.060 .044	.012	.029	.049	.033	.028	1
3	3PZ10–101	.226 .211	.061 .051	.105 .092	.067 .049	.012	.029	.056	.040	.035	
4	3PZ10–102	.257 .241	.069 .059	.108 .095	.070 .054	.012	.029	.059	.043	.038	
5	3PZ20–103	.289 .272	.078 .066	.124 .111	.086 .068	.012	.030	.075	.059	.054	
6	3PZ20–321/338	.321 .303	.086 .074	.148 .135	.081 .063	.015	.041	.065	.047	.042	2
7	3PZ20–322	.352 .333	.094 .081	.155 .142	.088 .070	.015	.041	.072	.054	.049	
8	3PZ20–323	.384 .364	.102 .088	.162 .149	.095 .077	.015	.041	.079	.061	.056	
10	3PZ20–324/339	.448 .425	.118 .103	.178 .165	.111 .093	.015	.042	.095	.077	.072	
12	3PZ30–167	.511 .487	.134 .118	.234 .221	.123 .105	.020	.055	.101	.083	.078	3
14	3PZ30–227/228	.557 .530	.146 .129	.248 .235	.137 .119	.020	.056	.115	.097	.092	
16	3PZ30–184	.609 .580	.159 .141	.256 .243	.145 .127	.020	.056	.123	.105	.100	
18	3PZ40–199	.661 .630	.173 .153	.306 .293	.160 .142	.025	.085	.133	.115	.110	4
20	3PZ40–200	.713 .680	.186 .165	.336 .323	.191 .173	.025	.086	.164	.146	.141	
24	3PZ40–173	.817 .780	.213 .190	.364 .351	.219 .201	.025	.086	.192	.174	.169	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

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TITLE: **POZIDRIV® FLAT TOP TRUSS HEAD DETAILS**

DRAWN: L. A. PROULX	DATE: 1–6–66	DRAWING NUMBER **PZHS-6C**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

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MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS				RECESS DIMENSIONS							DRIVER SIZE
				REF.				MAX. RAD.	MIN. WING WIDTH	PENETRATION			
										BEFORE PLATE		AFTER PLATE	
		A	B	H	O	M	T	K	N	MAX	MIN	MIN	
4	3PZ10–25	.261 .243	.186 .168	.030	.079 .067	.122 .109	.081 .065	.012	.029	.070	.054	.049	1
5	3PZ20–45	.291 .272	.207 .188	.040	.088 .075	.135 .122	.064 .046	.015	.040	.048	.030	.025	2
6	3PZ20–46	.321 .301	.228 .208	.040	.096 .084	.149 .136	.078 .060	.015	.040	.062	.044	.039	
7	3PZ20–47	.350 .330	.249 .228	.040	.105 .092	.154 .141	.083 .065	.015	.040	.067	.049	.044	
8	3PZ20–48	.380 .358	.270 .248	.040	.113 .101	.162 .149	.091 .073	.015	.040	.075	.057	.052	
10	3PZ20–49	.439 .416	.313 .288	.050	.130 .118	.178 .165	.107 .089	.015	.041	.091	.073	.068	
12	3PZ30–42	.498 .473	.355 .327	.050	.148 .134	.233 .220	.115 .097	.020	.056	.093	.075	.070	3
14	3PZ30–39	.558 .531	.397 .367	.050	.165 .151	.243 .230	.125 .107	.020	.056	.103	.085	.080	
1/4	3PZ30–43	.576 .548	.411 .380	.050	.170 .157	.245 .232	.127 .109	.020	.056	.105	.087	.082	
5/16	3PZ30–44	.719 .687	.512 .475	.060	.211 .197	.290 .277	.174 .156	.020	.057	.152	.134	.129	
3/8	3PZ40–36	.861 .825	.614 .571	.060	.253 .238	.344 .331	.191 .173	.025	.086	.164	.146	.141	4
7/16	3PZ40–37	1.004 .963	.716 .666	.070	.294 .278	.361 .348	.209 .191	.025	.086	.182	.164	.159	
1/2	3PZ40–38	1.146 1.101	.818 .762	.090	.335 .319	.377 .364	.226 .208	.025	.086	.199	.181	.176	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

NOTE: DIMENSION "O" IS A METAL TO METAL HEAD MEASURMENT.
WASHER EDGES MAY BE ROUNDED.

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TITLE:

POZIDRIV®
WASHER HEAD DETAILS

DRAWN: R. H. SOMERS	DATE: 2–1–66	DRAWING NUMBER PZHS-7
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

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MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS				RECESS DIMENSIONS							DRIVER SIZE
								MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE	
		A	B	H	O	M	T	K	N	MAX	MIN	MIN	
4	3PZ10–	.287 .268	.221 .211	.040 .027	.086 .075	.133 .120	.095 .079	.012	.029	.084	.068	.063	1
6	3PZ20–576	.352 .331	.271 .261	.051 .036	.103 .091	.167 .154	.100 .082	.015	.040	.084	.066	.061	2
8	3PZ20–596	.418 .394	.322 .310	.051 .036	.120 .107	.186 .173	.119 .101	.015	.041	.103	.085	.080	
10	3PZ20– 592 597	.483 .458	.372 .360	.062 .046	.137 .123	.213 .200	.147 .129	.015	.041	.131	.113	.108	
1/4	3PZ30–275	.634 .604	.492 .476	.063 .046	.175 .160	.280 .267	.170 .152	.020	.057	.148	.130	.125	3
5/16	3PZ40–294	.790 .756	.610 .594	.075 .055	.216 .198	.360 .347	.215 .197	.025	.086	.188	.170	.165	4

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

WASHER EDGES MAY BE ROUNDED.

MAX. "A" = 2.51D + .006
MIN. "A" = 2.435D – .005
MAX. "B" = "N" NOM. ON PUNCH + 1/4 TOL. OF WASHER DIA. "A"
MIN. "B" = "N" NOM. ON PUNCH – 1/4 TOL. OF WASHER DIA. "A"
MAX. "H" = OLD WASHER HEAD "H" REF. + 3/4 TOL. OF STD. RD. HD. HGT. +.002
MIN. "H" = OLD WASHER HEAD "H" REF. – 1/4 TOL. OF STD. RD. HD. HGT. +.002
MAX. "O" = SAME AS STD. RD. HD.
MIN "O" = " " " " " "

REVISION	PZCN–89 1–31–67	PZCN–96 3–17–67	PZCN–120 2–28–69	PZCN–125 10–17–69	PZCN–137 9–8–71

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TITLE:

POZIDRIV® FLAT TOP LARGE WASHER HEAD DETAILS

DRAWN: L. A. PROULX	DATE: 1–17–66	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11–7–11	**PZHS-7A** SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

MACHINE & TAPPING SCREWS

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS			RECESS DIMENSIONS							DRIVER SIZE
			HEIGHT OF OVAL	TOTAL HEAD HEIGHT			MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE	
		A	F	O	M	T	K	N	MAX	MIN	MIN	
0	3PZ00–24	.126 .115	.012 .008	.036 .028	.067 .054	.042 .026	.012	.018	.034	.018	.013	0
1	3PZ00–25	.154 .142	.015 .010	.044 .034	.074 .061	.049 .033	.012	.018	.043	.027	.022	
2	3PZ10–63	.181 .171	.018 .013	.050 .041	.104 .091	.065 .049	.012	.029	.054	.038	.033	1
3	3PZ10–64	.208 .197	.022 .016	.059 .048	.109 .096	.070 .054	.012	.029	.059	.043	.038	
4	3PZ10–62	.235 .223	.025 .018	.068 .056	.117 .104	.078 .062	.012	.029	.068	.052	.047	
5	3PZ20–144	.263 .249	.029 .021	.078 .064	.144 .131	.075 .057	.015	.040	.059	.041	.036	2
6	3PZ20–133	.290 .275	.032 .024	.087 .071	.156 .143	.087 .069	.015	.040	.072	.054	.049	
8	3PZ20–145	.344 .326	.039 .029	.105 .087	.181 .168	.113 .095	.015	.041	.097	.079	.074	
10	3PZ20–143	.399 .378	.045 .034	.123 .102	.199 .186	.131 .113	.015	.041	.115	.097	.092	
12	3PZ30–96	.454 .430	.052 .039	.141 .117	.260 .247	.147 .129	.020	.056	.125	.107	.102	3
1/4	3PZ30–97	.513 .488	.061 .046	.165 .138	.247 .261	.161 .143	.020	.057	.139	.121	.116	
5/16	3PZ40–107	.641 .609	.077 .059	.209 .174	.339 .326	.190 .172	.025	.086	.163	.145	.140	4
3/8	3PZ40–108	.769 .731	.094 .071	.253 .211	.387 .374	.240 .222	.025	.086	.213	.195	.190	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

REVISION PZCN–125 10–17–69

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TITLE:

POZIDRIV®
BINDING HEAD DETAILS

DRAWN: L. A. PROULX	DATE: 3–7–67	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11–7–11	**PZHS-8** SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

82° FLUSH HEAD AIRCRAFT MACHINE SCREWS

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS			RECESS DIMENSIONS							GAGING		DRIVER SIZE
		TO SHARP CORNER	ABS. MIN.	REF.			MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE			
		A	B	H	M	T	K	N	MAX	MIN	MIN	G	F	
0	3PZ00–4	.119 .105	.099	.035	.069 .056	.044 .028	.012	.018	.037	.021	.016	.078	.026 .016	0
1	3PZ00–5	.146 .130	.123	.043	.077 .064	.052 .036	.012	.018	.045	.029	.024	.101	.028 .016	
2	3PZ10–1	.172 .156	.147	.051	.102 .089	.064 .048	.012	.029	.053	.037	.032	.124	.029 .017	1
3	3PZ10–2	.199 .181	.171	.059	.107 .094	.069 .053	.012	.029	.058	.042	.037	.148	.031 .018	
4	3PZ10–3	.225 .207	.195	.067	.128 .115	.090 .074	.012	.030	.079	.063	.058	.172	.032 .019	
5	3PZ20–1	.252 .232	.220	.075	.154 .141	.087 .069	.015	.041	.071	.053	.048	.196	.034 .020	2
6	3PZ20–2	.279 .257	.244	.083	.174 .161	.107 .089	.015	.041	.091	.073	.068	.220	.036 .021	
8	3PZ20–3	.332 .308	.292	.100	.189 .176	.122 .104	.015	.041	.107	.089	.084	.267	.039 .023	
10	3PZ20–4	.385 .359	.340	.116	.204 .191	.137 .119	.015	.041	.122	.104	.099	.313	.042 .025	
1/4	3PZ30–3	.507 .477	.452	.153	.283 .270	.173 .155	.020	.057	.151	.133	.128	.424	.050 .029	3
5/16	3PZ40–4	.635 .600	.568	.191	.365 .352	.220 .202	.025	.086	.193	.175	.170	.539	.057 .034	4
3/8	3PZ40–2	.762 .722	.685	.230	.393 .380	.248 .230	.025	.086	.222	.204	.199	.653	.065 .039	
7/16	3PZ40–5	.812 .767	.723	.223	.409 .396	.265 .247	.025	.086	.238	.220	.215	.690	.073 .044	
1/2	3PZ40–3	.875 .831	.775	.223	.424 .411	.280 .262	.025	.086	.253	.235	.230	.739	.081 .049	
9/16	3PZ40–141	1.000 .950	.889	.260	.447 .434	.303 .285	.025	.087	.276	.258	.253	.851	.089 .053	
5/8	3PZ50–3	1.125 1.069	1.002	.298	.577 .554	.345 .324	.030	.098	.307	.286	.281	.962	.097 .058	5
3/4	3PZ50–4	1.375 1.305	1.230	.372	.641 .618	.410 .389	.030	.098	.372	.351	.346	1.186	.112 .067	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

REVISION	
PZCN–130	3–2–70
PZCN–125	10–17–69
PZCN–96	8–11–67
PZCN–89	2–6–67

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TITLE:

POZIDRIV®
AIRCRAFT 82° FLUSH HEAD DETAILS

DRAWN:	DATE:	DRAWING NUMBER
L. A. PROULX	1–10–66	**PZHS-11**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
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100° FLUSH HEAD AIRCRAFT & CLOSE TOLERANCE MACHINE SCREWS

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS			RECESS DIMENSIONS							GAGING		DRIVER SIZE
		TO SHARP CORNER	ABS. MIN.	REF.			MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE			
		A	B	H	M	T	K	N	MAX	MIN	MIN	G	F	
0	3PZ00–19	.119 .111	.096	.026	.061 .048	.036 .020	.012	.018	.029	.013	.008	.074	.019 .015	0
1	3PZ00–4	.146 .137	.120	.031	.069 .056	.044 .028	.012	.018	.037	.021	.016	.098	.021 .016	
2	3PZ10–80	.172 .163	.143	.037	.095 .082	.057 .041	.012	.028	.046	.030	.025	.121	.022 .017	1
3	3PZ10–1	.199 .189	.167	.043	.102 .089	.064 .048	.012	.029	.053	.037	.032	.144	.024 .018	
4	3PZ10–54	.225 .215	.191	.049	.117 .104	.079 .063	.012	.029	.068	.052	.047	.167	.025 .020	
5	3PZ20–123	.252 .241	.215	.054	.144 .131	.077 .059	.015	.040	.061	.043	.038	.191	.026 .021	2
6	3PZ20–1	.279 .267	.238	.060	.154 .141	.087 .069	.015	.041	.071	.053	.048	.214	.028 .022	
8	3PZ20–135	.332 .319	.285	.072	.186 .156	.102 .084	.015	.041	.086	.068	.063	.261	.030 .024	
10	3PZ20–136	.385 .371	.333	.083	.184 .171	.117 .099	.015	.041	.101	.083	.078	.307	.033 .026	
1/4	3PZ30–93	.507 .491	.442	.110	.247 .234	.136 .118	.020	.056	.114	.096	.091	.415	.039 .031	3
5/16	3PZ40– 260 79	.635 .616	.556	.138	.317 .304	.171 .153	.025	.085	.145	.127	.122	.526	.047 .037	4
3/8	3PZ40–106	.762 .741	.670	.165	.342 .329	.197 .179	.025	.085	.170	.152	.147	.638	.053 .042	
7/16	3PZ40–210	.890 .866	.783	.193	.366 .353	.221 .203	.025	.086	.194	.176	.171	.750	.060 .048	
1/2	3PZ40–2	1.017 .991	.897	.221	.393 .380	.248 .230	.025	.086	.222	.204	.199	.862	.066 .053	
9/16	3PZ40–3	1.145 1.116	1.011	.249	.429 .406	.280 .262	.025	.086	.253	.235	.230	.974	.073 .058	
5/8	3PZ50–11	1.272 1.241	1.124	.276	.516 .493	.283 .262	.030	.097	.245	.224	.219	1.086	.080 .063	5

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

REVISION	
PZCN–89	2–9–67
PZCN–104	10–17–67
PZCN–125	10–17–69
PZCN–130	3–2–70

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TITLE: **POZIDRIV® AIRCRAFT & CLOSE TOLERANCE 100° FLUSH HD. DETAILS**

DRAWN: L. A. PROULX	DATE: 1–11–66	DRAWING NUMBER **PZHS-12**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
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FLAT FILLISTER HEAD AIRCRAFT MACHINE SCREWS

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS		RECESS DIMENSIONS							DRIVER SIZE
		TO SHARP CORNER				MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE	
		A	H	M	T	K	N	MAX	MIN	MIN	
0	3PZ00–4	.096 .092	.037 .029	.069 .056	.044 .028	.012	.018	.037	.021	.016	0
1	3PZ00–5	.118 .114	.045 .037	.077 .064	.052 .036	.012	.018	.045	.029	.024	
2	3PZ10–1	.140 .136	.053 .044	.102 .089	.064 .048	.012	.029	.053	.037	.032	1
3	3PZ10–2	.161 .157	.061 .052	.107 .094	.069 .053	.012	.029	.058	.042	.037	
4	3PZ10–54	.183 .178	.069 .059	.117 .104	.079 .063	.012	.029	.068	.052	.047	
5	3PZ20–1	.205 .200	.078 .066	.154 .141	.087 .069	.015	.041	.071	.053	.048	2
6	3PZ20–134	.226 .221	.086 .074	.164 .151	.097 .079	.015	.041	.081	.063	.058	
8	3PZ20–2	.270 .265	.102 .088	.174 .161	.107 .089	.015	.041	.091	.073	.068	
10	3PZ20–3	.313 .306	.118 .103	.189 .176	.122 .104	.015	.041	.107	.089	.084	
1/4	3PZ30–2	.375 .367	.150 .133	.268 .255	.157 .139	.020	.056	.136	.118	.113	3
5/16	3PZ40–64	.438 .429	.183 .162	.335 .322	.190 .172	.025	.085	.163	.145	.140	4
3/8	3PZ40–4	.563 .552	.215 .191	.365 .352	.220 .202	.025	.086	.193	.175	.170	
7/16	3PZ40–2	.625 .615	.248 .221	.378 .365	.248 .230	.025	.086	.222	.204	.199	
1/2	3PZ40–5	.750 .739	.280 .250	.409 .396	.265 .247	.025	.086	.238	.220	.215	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

REVISION	PZCN–89 2–10–67	PZCN–105 10–17–67	PZCN–125 10–23–69	PZCN–136 11–16–70

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TITLE: **POZIDRIV® AIRCRAFT FLAT FILLISTER HEAD DETAILS**

DRAWN: L. A. PROULX	DATE: 1–12–66	DRAWING NUMBER **PZHS-13**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
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BRAZIER HEAD AIRCRAFT MACHINE SCREWS

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS		RECESS DIMENSIONS							DRIVER SIZE
		TO SHARP CORNER				MAX. RAD.	MIN. WING WIDTH	PENETRATION			
								BEFORE PLATE		AFTER PLATE	
		A	H	M	T	K	N	MAX	MIN	MIN	
6	3PZ20–125	.276 .258	.086 .074	.151 .138	.081 .063	.015	.040	.065	.047	.042	2
8	3PZ20–126	.331 .309	.102 .088	.163 .150	.094 .076	.015	.040	.078	.060	.055	
10	3PZ20–127	.385 .361	.118 .103	.176 .163	.107 .089	.015	.041	.091	.073	.068	
1/4	3PZ30–88	.493 .464	.150 .133	.248 .235	.133 .115	.020	.056	.111	.093	.088	3
5/16	3PZ40–97	.601 .568	.183 .162	.321 .308	.169 .151	.025	.085	.142	.124	.119	4
3/8	3PZ40–98	.709 .671	.215 .191	.350 .337	.199 .181	.025	.086	.173	.155	.150	
7/16	3PZ40–99	.817 .774	.248 .221	.376 .363	.226 .208	.025	.086	.200	.182	.177	
1/2	3PZ40–100	.924 .877	.280 .250	.400 .387	.251 .233	.025	.086	.224	.206	.201	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

REVISION PZCN–125 10–24–69

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TITLE: **POZIDRIV® AIRCRAFT BRAZIER HEAD DETAILS**

DRAWN: L. A. PROULX	DATE: 1–13–66	DRAWING NUMBER **PZHS-14**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
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PAN HEAD AIRCRAFT MACHINE SCREWS

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS		RECESS DIMENSIONS							DRIVER SIZE
						MAX. RAD.	MIN. WING WIDTH	PENETRATION			
								BEFORE PLATE		AFTER PLATE	
		A	H	M	T	K	N	MAX	MIN	MIN	
0	3PZ00–14	.116 .104	.044 .036	.067 .054	.040 .024	.012	.018	.033	.017	.012	0
1	3PZ00–15	.142 .130	.053 .044	.074 .061	.047 .031	.012	.018	.040	.024	.019	
2	3PZ10–13	.167 .155	.062 .053	.104 .091	.064 .048	.012	.028	.053	.037	.032	1
3	3PZ10–14	.193 .180	.071 .062	.112 .099	.073 .057	.012	.029	.062	.046	.041	
4	3PZ10–15	.219 .205	.080 .070	.122 .109	.083 .067	.012	.029	.072	.056	.051	
5	3PZ20–20	.245 .231	.089 .079	.154 .141	.084 .066	.015	.040	.068	.050	.045	2
6	3PZ20–21	.270 .256	.097 .087	.162 .149	.092 .074	.015	.040	.076	.058	.053	
8	3PZ20–23	.322 .306	.115 .105	.177 .164	.108 .090	.015	.041	.092	.074	.069	
10	3PZ20–25	.373 .357	.133 .122	.193 .180	.124 .106	.015	.041	.108	.090	.085	
1/4	3PZ30–22	.492 .473	.175 .162	.273 .260	.159 .141	.020	.057	.138	.120	.115	3
5/16	3PZ40–9	.615 .594	.218 .203	.341 .328	.191 .173	.025	.086	.164	.146	.141	4
3/8	3PZ40–26	.740 .716	.261 .244	.377 .364	.228 .210	.025	.086	.201	.183	.178	
7/16	3PZ40–27	.863 .838	.304 .286	.399 .386	.251 .233	.025	.086	.224	.206	.201	
1/2	3PZ40–28	.987 .958	.348 .327	.420 .407	.273 .255	.025	.086	.246	.228	.223	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

REVISION
PZCN–89 3–29–67
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TITLE: **POZIDRIV® AIRCRAFT PAN HEAD DETAILS**

DRAWN: L. A. PROULX	DATE: 1–14–66	DRAWING NUMBER **PZHS-15**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS			RECESS DIMENSIONS							DRIVER SIZE
							MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE	
		A	W	H	M	T	K	N	MAX	MIN	MIN	
4	3PZ10–41	.187 .181	.202	.060 .049	.103 .090	.074 .058	.012	.029	.063	.047	.042	1
5	3PZ10–42	.187 .181	.202	.070 .058	.111 .098	.082 .066	.012	.029	.071	.055	.050	
6	3PZ20–100	.250 .244	.272	.093 .080	.150 .137	.096 .078	.015	.040	.080	.062	.057	
8	3PZ20–102	.250 .244	.272	.110 .096	.169 .156	.121 .103	.015	.041	.105	.087	.082	2
10	3PZ20–103	.312 .305	.340	.120 .105	.178 .165	.132 .114	.015	.041	.116	.098	.093	
12	3PZ30–59	.312 .305	.340	.155 .139	.246 .233	.162 .144	.020	.056	.140	.122	.117	
14 1/4	3PZ30–71	.375 .367	.409	.190 .172	.275 .262	.196 .178	.020	.057	.174	.156	.151	3
1/4 7/16 HEX	3PZ30–87	.437 .428	.477	.190 .172	.275 .262	.196 .178	.020	.057	.174	.156	.151	
20 5/16	3PZ40–242	.500 .489	.545	.230 .208	.353 .340	.245 .227	.025	.086	.219	.201	.196	
24 3/8	3PZ40–243	.562 .551	.614	.295 .270	.380 .367	.276 .258	.025	.086	.249	.231	.226	4
* 5/16	3PZ40–284	.500 .489	.545	.255 .235	.317 .304	.196 .178	.025	.085	.172	.154	.149	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

NOTE: BOTH RECESS DEPTH ("T" DIMENSION) AND PENETRATION GAGING ARE MEASURED FROM TOP SURFACE OF HEAD.
* THIS PUNCH TO BE USED FOR G.M. PART NO. 7640995

REVISION
PZCN–125 10–17–69
PZCN–109 12–7–67

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TITLE: **POZIDRIV® INDENTED HEXAGON HEAD DETAILS**

DRAWN: R. H. SOMERS	DATE: 3–7–66	DRAWING NUMBER **PZHS-16**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

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MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS			RECESS DIMENSIONS							DRIVER SIZE
							MAX. RAD.	MIN. WING WIDTH	PENETRATION			
									BEFORE PLATE		AFTER PLATE	
		A	W	H	M	T	K	N	MAX	MIN	MIN	
												1
4	3PZ10–157	.187 .181	.202	.060 .049	.124 .111	.086 .070	.012	.029	.075	.059	.054	
6	3PZ20–137	.250 .244	.272	.093 .080	.145 .132	.078 .060	.015	.040	.062	.044	.039	
8	3PZ20–474	.250 .244	.272	.110 .096	.183 .170	.116 .098	.015	.041	.100	.082	.077	2
10	3PZ20–147	.312 .305	.340	.120 .105	.197 .184	.130 .112	.015	.041	.115	.097	.092	
12	3PZ30–94	.312 .305	.340	.155 .139	.259 .246	.148 .130	.020	.056	.127	.109	.104	3
14 1/4	3PZ30–58	.375 .367	.409	.190 .172	.273 .260	.163 .145	.020	.057	.141	.123	.118	
20 5/16	3PZ40–65	.500 .489	.545	.230 .208	.353 .340	.208 .190	.025	.086	.181	.163	.158	
24 3/8	3PZ40–66	.562 .551	.614	.295 .270	.378 .365	.233 .215	.025	.086	.206	.188	.183	4

REVISION PZCN–125 10–24–69

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TITLE: **POZIDRIV® TRIMMED HEXAGON HEAD DETAILS**

DRAWN: R. H. SOMERS	DATE: 3–4–66	DRAWING NUMBER **PZHS-17**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

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PHONE: 774–396–6190 FAX: 508–966–2326

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MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS		RECESS DIMENSIONS							DRIVER SIZE
						MAX. RAD.	MIN. WING WIDTH	PENETRATION			
								BEFORE PLATE		AFTER PLATE	
		A	F	M	T	K	N	MAX	MIN	MIN	
0	3PZ00–1	.100 .092	.035 .027	.075 .062	.049 .033	.012	.018	.041	.025	.020	0
1	3PZ00–3	.121 .113	.038 .031	.078 .065	.052 .036	.012	.018	.045	.029	.024	
2	3PZ10–66	.143 .133	.039 .034	.091 .078	.052 .036	.012	.028	.041	.025	.020	1
3	3PZ10–86	.163 .153	.047 .041	.100 .087	.061 .045	.012	.029	.050	.034	.029	
4	3PZ10–119	.184 .174	.054 .047	.110 .097	.071 .055	.012	.029	.060	.044	.039	
6	2PZ20–194	.226 .214	.066 .057	.147 .134	.078 .060	.015	.040	.063	.045	.040	2
8	3PZ20–392	.268 .256	.079 .069	.155 .142	.087 .069	.015	.040	.071	.053	.048	
10	3PZ20–197	.311 .297	.093 .081	.182 .169	.114 .096	.015	.041	.098	.080	.075	
1/4	3PZ30–109	.409 .391	.120 .105	.236 .223	.123 .105	.020	.056	.101	.083	.078	3
5/16	3PZ30–246	.510 .490	.151 .131	.286 .273	.174 .156	.020	.057	.152	.134	.129	
3/8	3PZ40–273	.610 .590	.178 .158	.319 .306	.171 .153	.025	.085	.144	.126	.121	4

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

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TITLE: **POZIDRIV® E.K. MINIATURE PAN HEAD DETAILS**

DRAWN: L. A. PROULX	DATE: 2–16–67	DRAWING NUMBER **PZHS-18**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

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MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NUMBER		HEAD DIMENSIONS					RECESS DIMENSIONS							DRIVER SIZE
	ROUND INDENT.	HEX. INDENT.	A	W	B	H	U	M	T	MAX. RAD. K	MIN. WING WIDTH N	PENETRATION BEFORE PLATE MAX	PENETRATION BEFORE PLATE MIN	PENETRATION AFTER PLATE MIN	
6	3RPZ20–100	3HPZ20–100	.250 .244	.272	.328 .302	.093 .080	.025 .015	.150 .137	.101 .083	.015	.040	.085	.087	.062	2
8	3RPZ20–102	3HPZ20–102			.348 .322	.110 .096	.031 .019	.169 .156	.120 .102		.041	.104	.086	.081	
10	3RPZ20–103	3HPZ20–103	.312 .305	.340	.414 .384	.120 .105		.178 .165	.140 .122			.123	.105	.100	
1/4	3RPZ30–71	3HPZ30–71	.375 .367	.409	.520 .480	.190 .172	.050 .030	.275 .262	.200 .182	.020	.057	.178	.160	.155	3
1/4 (7/16" HEX.)	3RPZ30–87	3HPZ30–87	.437 .428	.477					.203 .185			.181	.163	.158	
M4x7	3RPZ20–650		.276 .267	.297	.362 .335	.110 .096	.028 .020	.169 .156	.120 .102	.015	.041	.104	.086	.081	2
M4,8 (5.5 HEX.)	3RPZ20–656	3HPZ20–656	.217 .209	.233	.384 .352	.222 .148	.035 .024	.139 .126	.100 .080			.084	.064	.059	
M5x8	3RPZ20–651		.315 .306	.341	.413 .386	.120 .105	.031 .020	.182 .169	.144 .126			.127	.109	.104	
M6x1	3RPZ30–281		.394 .385	.432	.517 .480	.165 .149	.051 .031	.248 .235	.174 .156	.020	.056	.151	.133	.128	3

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

NOTE: BOTH RECESS DEPTH ("T" DIMENSION) AND PENETRATION GAGING ARE MEASURED FROM TOP SURFACE OF HEAD.

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TITLE: **POZIDRIV® INDENTED HEXAGON WASHER HEAD DETAILS**

DRAWN: R. GUARINO	DATE:	DRAWING NUMBER **PZHS-19**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

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MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NUMBER	HEAD DIMENSIONS						RECESS DIMENSIONS							DRIVER SIZE
										MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE	
		A	W	B	S	H	U	M	T	K	N	MAX	MIN	MIN	
8	3RPZ20–644	.276 .267	.303	.413 .385	.130 .120	.084	.024 .016	.169 .156	.120 .102	.015	.041	.104	.086	.081	2
4.2 MM	3RPZ20–644	7.01 6.78	7.70	10.49 9.78	3.30 3.05	2.13	0.60 0.40	4.29 3.96	3.05 2.59	.038	1.04	2.64	2.18	2.06	2

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TITLE: **POZIDRIV® SPECIAL INDENTED HEXAGON WASHER HEAD DETAILS**

DRAWN: C. M. B.	DATE: 3–4–76	DRAWING NUMBER **PZHS-19A**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

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MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NUMBER	HEAD DIMENSIONS					RECESS DIMENSIONS							DRIVER SIZE
									MAX. RAD.	MIN. WING WIDTH	PENETRATION			
											BEFORE PLATE		AFTER PLATE	
		A	W	B	H	U	M	T	K	N	MAX	MIN	MIN	
1/4	3RPZ30–59	.394 .385	.429	.520 .480	.190 .172	.051 .031	.246 .233	.166 .148	0.20	.056	.144	.126	.121	3
6.3 MM	3RPZ30–59	10.00 9.78	10.89	13.20 12.20	4.83 4.37	1.30 0.80	6.25 5.92	4.22 3.76	0.51	1.42	3.66	3.20	3.07	3

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TITLE: **POZIDRIV® SPECIAL INDENTED HEXAGON WASHER HEAD DETAILS**

DRAWN: C. M. B.	DATE: 9–14–76	DRAWING NUMBER **PZHS-19B**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

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MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	HEAD DIMENSIONS				RECESS DIMENSIONS							DRIVER SIZE
			REF.					MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE	
		A	B	H	O	M	T	K	N	MAX	MIN	MIN	
2	3PZ10–170	.194 .180	.157	.017 .014	.044 .035	.093 .080	.055 .037	.012	.028	.042	.026	.021	1
4	3PZ10–14	.257 .241	.215	.022 .019	.063 .053	.112 .099	.073 .057	.012	.029	.062	.046	.041	
6	3PZ20–20	.321 .303	.264	.025 .022	.074 .062	.154 .141	.084 .066	.015	.040	.068	.050	.045	2
7	3PZ20–21	.352 .333	.280	.027 .024	.079 .066	.162 .149	.092 .074	.015	.040	.076	.058	.053	
8	3PZ20–22	.384 .364	.317	.028 .025	.093 .079	.170 .157	.101 .083	.015	.041	.085	.067	.062	
10	2PZ20–632	.448 .425	.382	.033 .028	.114 .099	.184 .171	.115 .097	.015	.041	.099	.081	.076	
12	3PZ30–273	.511 .487	.434	.038 .033	.124 .108	.244 .231	.129 .111	.020	.056	.107	.089	.084	3
1/4	3PZ30–22	.573 .546	.519	043 .038	.145 .128	.273 .260	.159 .141	.020	.057	.137	.119	.115	
5/16	3PZ40–298	.698 .666	.638	.050 .043	.159 .141	.328 .315	.178 .160	.025	.085	.152	.134	.129	4
3/8	3PZ40–299	.823 .787	.757	.055 .048	.174 .155	.341 .318	.191 .173	.025	.086	.164	.146	.141	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

NOTE: DIMENSION "O" IS A METAL TO METAL HEAD MEASURMENT.
WASHER EDGES MAY BE ROUNDED.

PROPOSED ALTERNATE TO FLAT TOP TRUSS HEAD.

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TITLE:

POZIDRIV®
FLANGE HEAD DETAILS

DRAWN: A. P. C.	DATE: 7–2–70	DRAWING NUMBER PZHS-20
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
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BASIC SCREW SIZE D	THREAD PITCH	PUNCH NUMBER	HEAD DIMENSIONS TO SHARP CORNER A	HEAD DIMENSIONS ABS MIN B	HEAD DIMENSIONS MAX REF H	RECESS DIMENSIONS M	RECESS DIMENSIONS T	RECESS DIMENSIONS MAX. RAD. K	RECESS DIMENSIONS MIN. WING WIDTH N	RECESS DIMENSIONS PENETRATION BEFORE PLATE MAX	RECESS DIMENSIONS PENETRATION BEFORE PLATE MIN	RECESS DIMENSIONS PENETRATION AFTER PLATE MIN	GAGING G	GAGING F	DRIVER SIZE
M1.6 .063	0.35	3PZ00–4	.139	.117	.038	.069 .056	.044 .028	.012	.018	.037	.021	.016	.111	.014 .006	0
M2 .079	0.40	0Z–4	.173	.149	.047	.094 .081	.069 .053	.012	.018	.062	.046	.041	.130	.017 .009	
M2.5 .096	0.45	3PZ10–54	.217	.189	.059	.117 .104	.079 .063	.012	.029	.068	.052	.047	.173	.022 .012	1
M3 .118	0.50	3PZ10–3	.248	.217	.065	.128 .115	.090 .074	.012	.030	.079	.063	.058	.198	.025 .015	
M3.5 .138	0.60	2Z–48 3PZ20–134	.289	.255	.076	.164 .151	.097 .079	.015	.041	.081	.063	.058	.231	.029 .018	2
M4 .157	0.70	3PZ20–2	.331	.293	.087	.174 .161	.107 .089	.015	.041	.091	.073	.068	.265	.033 .021	
M4.5 .177	0.75	3PZ20–2	.354	.313	.089	.174 .161	.107 .089	.015	.041	.091	.073	.068	.283	.035 .022	
M5 .195	0.80	3PZ20–6	.394	.348	.098	.182 .169	.115 .097	.015	.041	.099	.081	.076	.315	.039 .026	
M5.5 .217	0.50	3PZ30–166	.433	.384	.108	.233 .220	.122 .104	.020	.055	.100	.082	.077	.346	.043 .029	3
M6.3 .248	1.00	3PZ30–85	.496	.441	.124	.248 .235	.137 .119	.020	.056	.115	.097	.092	.397	.050 .033	
M8 .315	1.25	3PZ40–106	.630	.563	.157	.342 .329	.197 .179	.025	.085	.170	.152	.147	.504	.063 .044	4
M10 .394	1.50	3PZ40–1	.787	.707	.197	.378 .365	.233 .215	.025	.086	.206	.188	.183	.630	.079 .056	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

SCREW SIZE	HEAD DIAMETER	HEAD HEIGHT	GAGING DIAMETER	PROTRUSION
M1.6 THRU M2.5	MAX A = 2.2D MIN B = 2.02D–.25	MAX H = .60D (MIN H = .533D–.13)	G = 1.76 D (G = .80MAX A)	MAX F= ,22D MIN F = (.18D–.125)COT46°
M3 THRU M4	MAX A = 2.1D MIN B = 1.92D0.25	MAX H = .55D (MIN H = .483D–.13)	G = 1.68 D (G = .80MAX A)	MAX F= .21D MIN F = (.17D–.125)COT46°
M4.5 THRU M10	MAX A = 2.0D MIN B = 1.82D–.25	MAX H = .50D (MIN H = .433D–.13)	G = 1.60D (G = .80MAX A)	MAX F= .20D MIN F = (.16D–.125)COT46°

DIMENSIONS IN INCHES

REVISION PZCN–150 2–20–75

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TITLE: **POZIDRIV® RECESS STANDARD METRIC FLAT HD. MACHINE SCREWS GENERAL MOTORS CORP.**

DRAWN: C. M. B.	DATE: 9–11–74	DRAWING NUMBER **PZHS-21**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

BASIC SCREW SIZE	THREAD PITCH	PUNCH NUMBER	HEAD DIMENSIONS			RECESS DIMENSIONS							GAGING		DRIVER SIZE
			TO SHARP CORNER	ABS MIN	MAX REF			MAX. RAD.	MIN. WING WIDTH	PENETRATION BEFORE PLATE		PENETRATION AFTER PLATE			
			A	B	H	M	T	K	N	MAX	MIN	MIN	G	F	
M2.2 .086	.079	0Z–4	.173	.149	.044	.094 .081	.069 .053	.012	.018	.062	.046	.041	.139	.017 .009	0
M2.8 .112	1.06	3PZ10–3	.248	.217	.068	.128 .115	.090 .074	.012	.030	.079	.063	.058	.198	.025 .015	1
M3.5 .138	1.27	2Z–48 3PZ20–134	.289	.255	.076	.164 .151	.097 .079	.015	.041	.081	.063	.058	.231	.029 .018	2
M4.2 .164	1.41	3PZ20–2	.331	.293	.083	.174 .161	.107 .089	.015	.041	.091	.073	.068	.265	.033 .021	
M4.8 .190	1.59	3PZ20–6	.394	.348	.102	.182 .169	.115 .097	.015	.041	.099	.081	.076	.315	.039 .026	
M5.5 .216	1.81	3PZ30–166	.433	.384	.109	.233 .220	.122 .104	.020	.055	.100	.082	.077	.346	.043 .029	3
M6.3 .250	1.81	3PZ30–85	.496	.442	.123	.248 .235	.137 .119	.020	.056	.115	.097	.092	.397	.050 .033	
M7.9 .3125	2.12	3PZ40–106	.630	.563	.158	.342 .329	.197 .179	.025	.085	.170	.152	.147	.504	.063 .044	4
M9.5 .375	2.12	3PZ40–1	.787	.707	.206	.378 .365	.233 .215	.025	.086	.206	.188	.083	.630	.079 .056	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

MAX A = FROM METRIC MACHINE SCREW STANDARD
MIN B = FROM METRIC MACHINE SCREW STANDARD
MAX H = $\frac{\text{MAX A} - \text{BASIC SCREW SIZE (2 DECIMAL PLACES)}}{2}$

G AND F FROM METRIC MACHINE SCREW STANDARD

DIMENSIONS IN INCHES

REVISION | PZCN–150 2–20–75 | PZCN–157 5–16–75

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TITLE: **POZIDRIV® RECESS STANDARD METRIC FLAT HD. TAPPING SCREWS GENERAL MOTORS CORP.**

DRAWN: C. M. B.	DATE: 9–9–74	DRAWING NUMBER **PZHS-22**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
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BASIC SCREW SIZE D	THREAD PITCH	PUNCH NUMBER	HEAD DIMENSIONS TO SHARP CORNER A	ABS MIN B	MAX REF H	O	RECESS DIMENSIONS M	T	MAX. RAD. K	MIN. WING WIDTH N	PENETRATION BEFORE PLATE MAX	MIN	AFTER PLATE MIN	DRIVER SIZE
M1.6 .063	0.35	3PZ00–8	.139	.117	.038	.054 .044	.076 .061	.046 .032	.012	.018	.042	.024	.019	0
M2 .079	0.40	0Z–5	.173	.149	.047	.067 .057	.095 .082	.066 .050	.012	.018	.060	.044	.039	
M2.5 .098	0.45	IZ–22	.217	.189	.059	.083 .072	.118 .105	.079 .063	.012	.029	.069	.053	.048	1
M3 .118	0.50	IZ–14 3PZ10–172	.248	.217	.065	.094 .081	.131 .118	.092 .076	.012	.030	.082	.066	.061	
M3.5 .138	0.60	3PZ20–8	.289	.255	.076	.110 .096	.178 .165	.109 .091	.015	.041	.093	.075	.070	2
M4 .157	0.70	3PZ20–12	.331	.293	.087	.126 .110	.192 .179	.124 .106	.015	.041	.108	.090	.085	
M4.5 .177	0.75	2Z–21	.354	.313	.089	.133 .116	.208 .195	.140 .122	.015	.041	.124	.100	.101	
M5 .197	0.80	2Z–22	.394	.348	.098	.148 .129	.216 .203	.148 .130	.015	.041	.132	.114	.109	
M5.5 .217	0.50	3PZ30–11	.433	.384	.108	.162 .143	.270 .257	.157 .139	.020	.056	.135	.117	.112	3
M6.3 .248	1.00	3Z–14 3PZ30–280	.496	.442	.124	.186 .164	.283 .270	.170 .152	.020	.057	.148	.130	.125	
M8 .315	1.25	4Z–19	.630	.563	.157	.236 .210	.354 .341	.205 .187	.025	.084	.178	.160	.155	4
M10 .394	1.50	4Z–85	.787	.707	.197	.295 .264	.399 .386	.253 .235	.025	.086	.226	.208	.203	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

SCREW SIZE	HEAD DIAMETER	HEAD SIDE HEIGHT	TOTAL HEAD HEIGHT
M1.6 THRU M2.5	MAX A = 2.2D MIN B = 2.02D–.25	MAX H = .60D (MIN H = .533D–.13)	MAX O = .85D MIN O = .783D–.13
M3 THRU M4	MAX A = 2.1D MIN B = 1.92D0.25	MAX H = .55D (MIN H = .483D–.13)	MAX O = .80D MIN O = .733D–.13
M4.5 THRU M10	MAX A = 2.0D MIN B = 1.82D–.25	MAX H = .50D (MIN H = .433D–.13)	MAX O = .75D MIN O = .683D–.13

DIMENSIONS IN INCHES

REVISION	
PZCN–158	7–30–75
PZCN–145	1–2–75

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TITLE: **POZIDRIV® RECESS STANDARD METRIC OVAL HD. MACHINE SCREWS GENERAL MOTORS CORP**

DRAWN: C. M. B.	DATE: 9–5–74	DRAWING NUMBER **PZHS-23**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
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BASIC SCREW SIZE D	THREAD PITCH	PUNCH NUMBER	HEAD DIMENSIONS TO SHARP CORNER A	ABS MIN B	MAX REF H	O	RECESS DIMENSIONS M	T	MAX. RAD. K	MIN. WING WIDTH N	PENETRATION BEFORE PLATE MAX	BEFORE PLATE MIN	AFTER PLATE MIN	DRIVER SIZE
M2.2 .086	.079	0Z–5	.173	.149	.044	.063 .053	.095 .082	.066 .050	.012	0.18	.060	.044	.039	0
M2.8 .112	1.06	1Z–14 3PZ10–172	.248	.217	.068	.098 .085	.131 .118	.092 .076	.012	0.29	.082	.066	.061	1
M3.5 .138	1.27	3PZ20–8	.289	.255	.076	.110 .096	.176 .165	.109 .091	.015	0.41	.093	.075	.070	2
M4.2 .164	1.41	3PZ20–12	.331	.293	.083	.123 .107	.192 .179	.124 .106	.015	0.41	.108	.090	.085	
M4.8 .190	1.59	2Z–22	.394	.348	.102	.151 .132	.216 .203	.148 .130	.015	0.41	.132	.114	.109	
M5.5 .216	1.81	3PZ30–11	.433	.384	.109	.163 .143	.270 .257	.157 .139	.020	0.56	.135	.117	.112	3
M6.3 .250	1.81	3Z–14 3PZ30–280	.496	.442	.123	.185 .163	.283 .270	.170 .152	.020	0.57	.148	.130	.125	
M7.9 .3125	2.12	4Z–19	.630	.563	.159	.237 .211	.354 .341	.205 .187	.025	0.84	.178	.160	.155	4
M9.5 .375	2.12	4Z–17	.784	.707	.206	.305 .273	.438 .425	.290 .272	.025	0.86	.263	.245	.240	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

MAX A = FROM OVAL HEAD MACHINE SCREW STANDARD
MIN A = FROM OVAL HEAD MACHINE SCREW STANDARD
MAX H = MAX A – BASIC SCREW SIZE (2 DECIMAL PLACES)
2
MAX O = MAX H + (MAX O – MAX H FROM MACHINE SCREW STANDARD)
MIN O = MAX O – TOLERANCE FROM MACHINE SCREW STANDARD

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DIMENSIONS IN INCHES

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TITLE: **POZIDRIV® RECESS STANDARD METRIC OVAL HD. TAPPING SCREWS GENERAL MOTORS CORP.**

DRAWN: C. M. B.	DATE: 9–6–74	DRAWING NUMBER **PZHS-24**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

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BASIC SCREW SIZE D	THREAD PITCH	PUNCH NUMBER	HEAD DIMENSIONS A	HEAD DIMENSIONS F	HEAD DIMENSIONS R	RECESS DIMENSIONS M	RECESS DIMENSIONS T	MAX. RAD. K	MIN. WING WIDTH N	PENETRATION BEFORE PLATE MAX	PENETRATION BEFORE PLATE MIN	PENETRATION AFTER PLATE MIN	DRIVER SIZE
M1.6 .063	0.35	3PZ00–14	.126 .115	.046 .038	.006	.067 .054	.040 .024	.012	.018	.033	.017*	.012*	0
M2 .079	0.4	3PZ00–15	.157 .145	.056 .048	.008	.074 .061	.047 .031	.012	.018	.040	.024*	.019*	
M2.5 .098	0.45	3PZ10–14	.197 .184	.070 .061	.010	.112 .099	.073 .057	.012	.029	.062	.046	.041	1
M3 .118	0.5	3PZ10–15	.236 .222	.084 .074	.012	.122 .109	.083 .067	.012	.029	.072	.056	.051	
M3.5 .138	0.6	3PZ20–21	.276 .261	.096 .086	.015	.162 .149	.092 .074	.015	.040	.076	.058	.053	2
M4 .157	0.7	3PZ20–23	.315 .300	.110 .099	.015	.177 .164	.108 .090	.015	.041	.092	.074	.069	
M4.5 .177	0.75	3PZ20–24	.354 .338	.124 .112	.018	.185 .172	.116 .098	.015	.041	.100	.082	.077	
M5 .197	0.8	3PZ20–25	.394 .377	.138 .125	.022	.193 .180	.124 .106	.015	.041	.108	.090	.085	
M6.3 .248	1	3PZ30–22	.496 .477	.174 .161	.035	.273 .260	.159 .141	.020	.057	.137	.119	.114	3
M8 .315	1.25	3PZ40–9	.630 .608	.220 .205	.040	.341 .328	.191 .173	.025	.086	.164	.146	.141	4
M10 .394	1.5	3PZ40–27	.787 .763	.276 .257	.040	.399 .386	.251 .233	.025	.086	.224	.206	.201	

* SUBJECT TO REVISION BASED ON PRODUCTION EXPERIENCE AND USE.

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

SCREW SIZE	HEAD DIAMETER	HEAD HEIGHT
M1.6 THRU M3	MAX A = 2D MIN A = 1.96D – .23	MAX F = .692D + .05 MIN F = .652D – .08
M3.5 THRU M5	MAX A = 2D MIN A = 1.96D – .23	MAX F = .7D MIN F = .66D – .13
M6.3 THRU M10	MAX A = 2D MIN A = 1.96D – .23	MAX F = 7D MIN F = .66D – .08

DIMENSIONS IN INCHES

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TITLE: **POZIDRIV® RECESS STANDARDS**
METRIC PAN HD. MACHINE SCREWS
GENERAL MOTORS CORP.

DRAWN: A. P. C.	DATE: 7–3–74	DRAWING NUMBER **PZHS-25**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
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BASIC SCREW SIZE D	THREAD PITCH	PUNCH NUMBER	HEAD DIMENSIONS A	HEAD DIMENSIONS F	HEAD DIMENSIONS R	RECESS DIMENSIONS M	RECESS DIMENSIONS T	RECESS DIMENSIONS MAX. RAD. K	RECESS DIMENSIONS MIN. WING WIDTH N	PENETRATION BEFORE PLATE MAX	PENETRATION BEFORE PLATE MIN	PENETRATION AFTER PLATE MIN	DRIVER SIZE
M2.2 .086	.079	3PZ10–13	.167 .155	.062 .053	.010	.104 .091	.064 .048	.012	.028	.053	.037	.032	1
M2.8 .112	1.06	3PZ10–15	.219 .205	.080 .070	.010	.122 .109	.083 .067	.012	.029	.072	.056	.051	
M3.5 .138	1.27	3PZ20–21	.270 .256	.097 .087	.015	.162 .149	.092 .074	.015	.040	.076	.058	.053	2
M4.2 .164	1.41	3PZ20–23	.322 .306	.115 .105	.015	.177 .164	.108 .090	.015	.041	.092	.074	.069	
M4.8 .190	1.59	3PZ20–25	.373 .357	.133 .122	.020	.193 .180	.124 .106	.015	.041	.108	.090	.085	
M5.5 .216	1.81	3PZ30–21	.425 .407	.151 .139	.025	.254 .241	.139 .121	.020	.056	.117	.099	.094	3
M6.3 .250	1.81	3PZ30–22	.492 .473	.175 .162	.035	.273 .260	.159 .141	.020	.057	.137	.119	.114	
M7.9 .3125	2.12	3PZ40–9	.615 .594	.218 .203	.040	.341 .328	.191 .173	.025	.086	.164	.146	.141	4
M9.5 .375	2.12	3PZ40–26	.740 .716	.261 .244	.040	.377 .364	.228 .210	.025	.086	.201	.183	.178	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

SCREW SIZE	HEAD DIAMETER	HEAD HEIGHT
M2.2 THRU M5.5	MAX A=1.98D–.076 MIN A=1.94D–.305	MAX F =.692D +.051 MIN F =.652D –.076
M6.3 THRU M9.5	MAX A=1.98D–.076 MIN A=1.94D–.305	MAX F = .692D +.051 MIN F = .652D –.025

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TITLE: **POZIDRIV® RECESS STANDARD METRIC PAN HEAD TAPPING SCREWS GENERAL MOTORS CORP.**

DRAWN: C. M. B.	DATE: 8–23–74	DRAWING NUMBER **PZHS-26**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

FOR SHORT LENGTH SCREWS

SCREW SIZE D	THREAD PITCH	PUNCH NUMBER	HEAD DIMENSIONS NOM HEAD DIA	A	H	O	NOM P	RECESS DIMENSIONS M	T	MAX. RAD. K	MIN. WING WIDTH N	PENETRATION BEFORE PLATE MAX	BEFORE PLATE MIN	AFTER PLATE MIN	DRIVER SIZE
M3.5 .138	0.6	1Z–14 3PZ10–172	3	.248 .229	.063 .052	.094 .083	.018	.131 .118	.092 .076	.012	.030	.082	.066	.061	1
M4 .157	0.7	3PZ20–8	3.5	.289 .269	.075 .063	.114 .102	.022	.178 .165	.109 .091	.015	.041	.093	.075	.070	2
M5 .197	0.8	3PZ20–12	4	.331 .308	.077 .064	.124 .111	.025	.192 .179	.124 .106	.015	.041	.108	.090	.085	
M6.3 .248	1.0	2Z–22	5	.394 .368	.085 .070	.140 .125	.030	.215 .203	.148 .130	.015	.041	.132	.114	.108	

FOR LONG LENGTH SCREWS

SCREW SIZE D	THREAD PITCH	PUNCH NUMBER	HEAD DIMENSIONS NOM HEAD DIA	A	H	O	NOM P	RECESS DIMENSIONS M	T	MAX. RAD. K	MIN. WING WIDTH N	PENETRATION BEFORE PLATE MAX	BEFORE PLATE MIN	AFTER PLATE MIN	DRIVER SIZE
M3.5 .138	0.6	1Z–14 3PZ10–172	3	.248 .229	.063 .052	.094 .083	.018	.131 .118	.092 .076	.012	.030	.082	.066	.061	1
M4 .157	0.7	3PZ20–28	3.5	.289 .269	.075 .063	.114 .102	.022	.194 .181	.126 .108	.015	.041	.109	.091	.086	2
M5 .197	0.8	3PZ20–255	4	.331 .308	.077 .064	.124 .111	.025	.207 .194	.139 .121	.015	.041	.122	.104	.099	
M6.3 .248	1.0	2Z–22	5	.394 .368	.085 .070	.140 .125	.030	.216 .203	.148 .130	.015	.041	.132	.114	.109	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

SCREW SIZE	HEAD DIAMETER	HEAD SIDE HEIGHT	HEAD RADIUS
M3.5 THRU M5	MAX A=2.1(NOM HD DIA) MIN A=2.02(NOM HD DIA)–.25	MAX H $= \frac{\text{MAX A}-\text{D}}{2} + .414\text{P}$ MIN H $= \left(\frac{\text{MIN A}-\text{D}}{2}\right)\text{COT}46^\circ + .414\text{P}$	NOM P = .08 MIN A
M6.3	MAX A=2(NOM HD DIA) MIN A=2.02(NOM HD DIA)–.75		

TOTAL HEAD HEIGHT

M3.5 MAX O = MAX H + .80
MIN O = MIN H + .80

M6.3 MAX O = MAX H + 1.40
MIN O = MIN H + 1.40

M4 MAX O = MAX H + 1.00
MIN O = MIN H + 1.00

M5 MAX O = MAX H + 1.20
MIN O = MIN H + 1.20

DIMENSIONS IN INCHES

REVISION PZCN–150 2–20–75

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TITLE: **POZIDRIV® METRIC STANDARD OVAL TRIM HEAD MACHINE SCREWS GENERAL MOTORS CORP.**

DRAWN: C. M. B.	DATE: 8–27–74	DRAWING NUMBER **PZHS-27**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
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(SCREW SIZE SHOWN IN BOTH MM & INCHES)

FOR SHORT LENGTH SCREWS

SCREW SIZE D	THREAD PITCH	PUNCH NUMBER	HEAD DIMENSIONS					RECESS DIMENSIONS							DRIVER SIZE
			NOM HEAD DIA	A	H	O	NOM P	M	T	MAX. RAD. K	MIN. WING WIDTH N	PENETRATION BEFORE PLATE MAX	PENETRATION BEFORE PLATE MIN	PENETRATION AFTER PLATE MIN	
M3.5 .138	1.27	1Z–14 3PZ10–172	3	.248 .229	.062 .051	.094 .083	.018	.131 .118	.092 .076	.012	.030	.082	.066	.061	1
M4.2 .164	1.41	3PZ20–8	3.5	.289 .269	.072 .059	.111 .099	.022	.178 .165	.109 .091	.015	.041	.093	.075	.070	2
M4.8 .190	1.59	3PZ20–12	4	.331 .308	.080 .067	.128 .115	.025	.192 .179	.124 .106	.015	.041	.108	.090	.085	
M6.3 .250	1.81	2Z–22	5	.394 .368	.084 .069	.139 .124	.030	.216 .203	.148 .130	.015	.041	.132	.114	.109	

FOR LONG LENGTH SCREWS

SCREW SIZE D	THREAD PITCH	PUNCH NUMBER	HEAD DIMENSIONS					RECESS DIMENSIONS							DRIVER SIZE
			NOM HEAD DIA	A	H	O	NOM P	M	T	MAX. RAD. K	MIN. WING WIDTH N	PENETRATION BEFORE PLATE MAX	PENETRATION BEFORE PLATE MIN	PENETRATION AFTER PLATE MIN	
M3.5 .138	1.27	1Z–14 3PZ10–172	3	.248 .229	.062 .051	.094 .083	.018	.131 .118	.092 .076	.012	.030	.082	.066	.061	1
M4.2 .164	1.41	3PZ20–28	3.5	.289 .269	.072 .059	.111 .099	.022	.194 .181	.126 .108	.015	.041	.109	.091	.086	2
M4.8 .190	1.59	3PZ20–255	4	.331 .308	.080 .067	.128 .115	.025	.207 .194	.139 .121	.015	.041	.122	.104	.099	
M6.3 .250	1.81	2Z–22	5	.394 .368	.084 .069	.139 .124	.030	.216 .203	.148 .130	.015	.041	.132	.114	.109	

RECESS PENETRATION VALUES AS SHOWN ARE FINISHED PRODUCT STANDARDS AND SHOULD NOT BE USED AS A BASIS FOR THE INSPECTION OF POZIDRIV® PUNCHES.

MIN A – FROM OVAL TRIM HEAD MACHINE SCREW STANDARD

MIN A – FROM OVAL TRIM HEAD MACHINE SCREW STANDARD

$$\text{MAX H} = \frac{\text{MAX A} - \text{BASIC SIZE (2 DECIMAL PLACES)}}{2} + .414\text{P}$$

$$\text{MIN H} = \left(\frac{\text{MIN A} - \text{BASIC SIZE (2 DECIMAL PLACES)}}{2}\right)\text{COT}46^\circ + .414\text{P}$$

M3.5 MAX O = MAX H + .80
MIN O = MIN H + .80

M6.3 MAX O = MAX H + 1.40
MIN O = MIN H + 1.40

M4.2 MAX O = MAX H + 1.00
MIN O = MIN H + 1.00

NOM P = .08 MIN A

M5 MAX O = MAX H +1.20
MIN O = MIN H +1.20

NOM P = .08 MIN A

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TITLE: **POZIDRIV® RECESS STANDARD METRIC OVAL TRIM HD. TAP. SCREW GENERAL MOTORS CORP.**

DRAWN: C. M. B.	DATE: 8–28–74	DRAWING NUMBER **PZHS-28**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

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PART NUMBER	PUNCH NUMBER	M	T	MAX. RAD. K	MIN. WING WIDTH N	PENETRATION MAX	PENETRATION MIN	DRIVER SIZE
DIN 965–1.6	3PZ00–5	.077 .064	.052 .036	.012	.018	.045	.035	0
IFI 1982–2+2.2	3PZ00–28	.092 .079	.067 .051	.012	.019	.060	.044	0
DIN 965–2	3PZ10–80	.095 .082	.057 .041	.012	.028	.046	.036	1
DIN 7982–2.2	3PZ10–1	.102 .089	.064 .048	.012	.028	.053	.043	1
DIN 965–2.5	3PZ10–2	.107 .094	.069 .053	.012	.029	.058	.048	1
IFI 1982–2.5 DIN 7997–2.5 965–3, 7982–2.9	3PZ10–54	.117 .104	.079 .063	.012	.029	.068	.052 .058 .058	1
ISI 1982–2.9+3 DIN 7997–3	3PZ10–3	.128 .115	.090 .074	.012	.029	.079	.063 .069	1
DIN 965–3.5	3PZ20–1	.154 .141	.087 .069	.015	.040	.071	.053	2
DIN 7982–3.5 7997–3.5, 965–4	3PZ20–134	.164 .151	.097 .079	.015	.040	.081	.063	2
IFI 1982–3.5	3PZ20–135	.169 .156	.102 .084	.015	.041	.086	.069	2
DIN 7982–3.9 7997–4	3PZ20–2	.174 .161	.107 .089	.015	.041	.091	.073	2
IFI 1982–4.2+4 DIN 965–5, 7982, 4.2 7997–4.5	3PZ20–6	.182 .169	.115 .097	.015	.041	.099	.081	2
IFI 1982–4.8+5 DIN 7982–4.8, 7997–5	3PZ20–486	.204 .191	.137 .119	.015	.041	.122	.104	2
DIN 965–6,7997–5.5	3PZ30–85	.248 .235	.137 .119	.020	.056	.115	.097	3
IFI 1982–5.5 DIN 7982–5.5, 7997–7	3Z11	.258 .245	.147 .129	.020	.056	.125	.107	3
IFI 1982–6.3+6	3PZ30–2	.268 .255	.157 .139	.020	.057	.136	.118	3
DIN 7982–6.3,7997–7	3PZ30–3	.283 .270	.173 .155	.020	.057	.151	.133	3
DIN 965–8, 7997–8	3PZ40–106	.342 .329	.197 .179	.025	.085	.170	.152	4
IFI 1982–8	3PZ40–323	.353 .340	.208 .190	.025	.086	.181	.163	4
DIN 965–10	3PZ40–1	.378 .365	.233 .215	.025	.086	.206	.188	4
IFI 1982–9.5+10	3PZ40–2	.393 .380	.248 .230	.025	.086	.222	.204	4

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TITLE: **POZIDRIV® IFI & DIN STDS.**
METRIC FLAT COUNTERSUNK HEADS
RECESS DIMENSIONS ONLY

DRAWN: J. GRADY	DATE: 8–25–92	DRAWING NUMBER **PZHS-29**
CHECKED: J. GRADY	DATE: 9–17–92	SHEET 1 OF 1

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RECESS DIMENSIONS
METRIC OVAL (RAISED COUNTERSUNK) HEADS

PART NUMBER	PUNCH NUMBER	M	T	MAX. RAD. K	MIN. WING WIDTH N	PENETRATION MAX	PENETRATION MIN	DRIVER SIZE
DIN 966–1.6	3PZ00–30	.079 .066	.052 .042	.012	.018	.045	.035	0
IFI 1982–2.2+2	3PZ00–27	.101 .088	.075 .059	.012	.019	.068	.052	0
DIN 966–2 DIN 7995–2	3PZ10–192	.103 .090	.064 .054	.012	.028	.053	.043	1
DIN 7983–2.2	3PZ10–195	.103 .090	.064 .054	.012	.028	.053	.043	1
IFI 1982–2.5	3PZ10–190	.109 .096	.070 .054	.012	.029	.059	.043	1
DIN 966–2.5 DIN 7995–2.5	3PZ10–193	.119 .106	.080 .070	.012	.029	.069	.059	1
IFI 1982–2.9+3	3PZ10–191	.124 .111	.085 .069	.012	.029	.075	.059	1
DIN 966–3 DIN 7995–3	3PZ10–194	.132 .119	.093 .083	.012	.029	.082	.072	1
DIN 7983–2.9	3PZ10–196	.132 .119	.093 .083	.012	.029	.082	.072	1
DIN 7983–3.5	3PZ20–695	.178 .165	.108 .090	.015	.041	.092	.074	2
DIN 966–3.5 DIN 7995–3.5	3PZ20–691	.179 .166	.110 .092	.015	.041	.094	.076	2
DIN 7983–3.9	3PZ20–696	.182 .169	.113 .095	.015	.041	.097	.079	2
IFI 1982–3.5	3PZ20–688	.182 .169	.114 .096	.015	.041	.098	.080	2
DIN 966–4 DIN 7995–4	3PZ20–692	.191 .178	.122 .104	.015	.041	.107	.089	2
DIN 7983–4.2	3PZ20–697	.192 .179	.123 .105	.015	.041	.107	.089	2
IFI 1982–4.2+4	3PZ20–689	.199 .186	.131 .113	.015	.041	.115	.097	2
DIN 7995–4.5	3PZ20–693	.208 .195	.140 .122	.015	.041	.124	.106	2
DIN 7983–4.8	3PZ40–698	.208 .195	.139 .121	.015	.041	.124	.106	2
DIN 966–5 DIN 7995–5	3PZ40–694	.216 .203	.148 .130	.015	.041	.132	.114	2
IFI 1982–4.8+5	3PZ40–690	.226 .213	.158 .140	.015	.041	.142	.124	2

* DO NOT USE VALUES LISTED IN IFI HANDBOOK

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TITLE: **POZIDRIV® IFI & DIN STDS. METRIC RAISED COUNTERSUNK HDS. RECESS DIMENSIONS ONLY**

DRAWN: J. GRADY	DATE: 8–21–92	DRAWING NUMBER **PZHS-30**
CHECKED: J. GRADY	DATE: 9–17–92	SHEET 1 OF 2

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
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RECESS DIMENSIONS
METRIC OVAL (RAISED COUNTERSUNK) HEADS CONTINUED

PART NUMBER	PUNCH NUMBER	M	T	MAX. RAD. K	MIN. WING WIDTH N	PENETRATION MAX	PENETRATION MIN	DRIVER SIZE
DIN 7983–5.5	3PZ30–311	.269 .256	.155 .137	.020	.056	.133	.115	3
DIN 7995–5.5	3PZ30–306	.269 .256	.155 .137	.020	.056	.133	.115	3
IFI 1982–5.5	3PZ30–309	.281 .268	.168 .150	.020	.057	.146	.128	3
DIN 966–6 DIN 7995–6	3PZ30–307	.283 .270	.170 .152	.020	.057	.148	.130	3
DIN 7983–6.3	3PZ30–312	.287 .274	.173 .155	.020	.057	.152	.134	3
IFI 1982–6+6.3	3PZ30–310	.293 .280	.180 .162	.020	.057	.159	.141	3
DIN 7995–7	3PZ30–308	.324 .311	.211 .193	.020	.057	.189	.171	3
DIN 966–8 DIN 7995–8	3PZ40–326	.354 .341	.205 .187	.025	.086	.178	.160	4
IFI 1982–8	3PZ40–324	.396 .383	.248 .230	.025	.086	.221	.203	4
DIN 966–10	3PZ40–327	.401 .388	.253 .235	.025	.086	.226	.208	4
IFI 1982–9.5+10	3PZ40–325	.446 .433	.299 .281	.025	.087	.272	.254	4

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TITLE: **POZIDRIV® IFI & DIN STDS. METRIC RAISED COUNTERSUNK HDS. RECESS DIMENSIONS ONLY**

DRAWN: J. GRADY	DATE: 8–21–92	DRAWING NUMBER **PZHS-30**
CHECKED: J. GRADY	DATE: 9–17–92	SHEET 2 OF 2

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
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RECESS DIMENSIONS
PAN AND RAISED CHEESE HEADS

PART NUMBER	PUNCH NUMBER	M	T	MAX. RAD. K	MIN. WING WIDTH N	PENETRATION MAX	PENETRATION MIN	DRIVER SIZE
DIN 7985–1.6	3PZ00–31	.080 .067	.053 .037	.012	.019	.046	.036	0
IFI 1982–2.2+2	3PZ00–29	.081 .068	.054 .038	.012	.019	.047	.031	0
DIN 7985–2	3PZ10–200	.103 .090	.064 .048	.012	.028	.053	.043	1
DIN 7996–2.5	3PZ10–198	.103 .090	.064 .048	.012	.028	.053	.043	1
DIN 7981–2.2	3PZ10–187	.104 .091	.064 .048	.012	.028	.053	.043	1
IFI 1982–2.5	3PZ10–185	.109 .096	.070 .054	.012	.029	.059	.043	1
DIN 7985–2.5	3PZ10–201	.110 .097	.071 .055	.012	.029	.060	.050	1
IFI 1982–2.9+3	3PZ10–186	.119 .106	.080 .064	.012	.029	.069	.053	1
DIN 7981–2.9	3PZ10–197	.122 .109	.083 .067	.012	.029	.072	.062	1
DIN 7996–3	3PZ10–199	.122 .109	.083 .067	.012	.029	.072	.062	1
DIN 7985–3	3PZ10–202	.126 .113	.087 .071	.012	.029	.076	.066	1
DIN 7981–3.5	3PZ20–21	.162 .149	.092 .074	.015	.040	.076	.058	2
IFI 1982–3.5 DIN 7996–3.5	3PZ20–680	.161 .148	.092 .074	.015	.040	.076	.058	2
DIN 7985–3.5	3PZ20–702	.168 .155	.099 .081	.015	.040	.083	.065	2
DIN 7981–3.9	3PZ20–22	.170 .157	.101 .083	.015	.040	.085	.067	2
DIN 7996–4	3PZ20–700	.170 .157	.101 .083	.015	.040	.085	.067	2
DIN 7985–4	3PZ20–703	.177 .164	.108 .090	.015	.041	.093	.075	2
DIN 7981–4.2	3PZ20–23	.177 .164	.108 .090	.015	.041	.092	.074	2
DIN 7996–4.5	3PZ20–701	.177 .164	.108 .090	.015	.041	.092	.074	2
IFI 1982–4.2+4	3PZ20–681	.178 .165	.109 .091	.015	.041	.093	.075	2

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TITLE: **POZIDRIV® IFI & DIN STDS. METRIC PAN & RAISED CHEESE HEAD RECESS DIMENSIONS ONLY**

DRAWN: J. GRADY	DATE: 9–11–92	DRAWING NUMBER **PZHS-31**
CHECKED: J. GRADY	DATE: 9–17–92	SHEET 1 OF 2

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

RECESS DIMENSIONS
METRIC PAN AND RAISED CHEESE HEADS, CONTINUED

PART NUMBER	PUNCH NUMBER	M	T	MAX. RAD. K	MIN. WING WIDTH N	PENETRATION MAX	PENETRATION MIN	DRIVER SIZE
IFI 1982–4.8+5 DIN 7996–5	3PZ20–699	.192 .179	.123 .105	.015	.041	.108	.090	2
DIN 7981–4.8	3PZ20–25	.193 .180	.124 .106	.015	.041	.108	.090	2
DIN 7985–5	3PZ20–704	.206 .193	.138 .120	.015	.041	.122	.104	2
DIN 7981–5.5	3PZ30–21	.254 .241	.139 .121	.020	.056	.117	.099	3
IFI 1982–5.5 DIN 7996–5.5	3PZ30–315	.254 .241	.139 .121	.020	.056	.118	.100	3
DIN 7985–6	3PZ30–313	.272 .259	.159 .141	.020	.057	.137	.119	3
DIN 7981–6.3 DIN 7996–6	3PZ30–22	.273 .260	.159 .141	.020	.057	.137	.119	3
IFI 1982–6.3+6	3PZ30–314	.274 .261	.160 .142	.020	.057	.138	.120	3
DIN 7996–7	3PZ30–185	.284 .271	.170 .152	.020	.057	.149	.131	3
DIN 7996–8	3PZ40–9	.341 .328	.191 .173	.025	.085	.164	.146	4
IFI 1981–8	3PZ40–316	.354 .341	.204 .186	.025	.086	.177	.159	4
DIN 7985–8	3PZ40–328	.354 .341	.205 .187	.025	.086	.178	.160	4
DIN 7985–10	3PZ40–27	.399 .386	.251 .233	.025	.086	.224	.206	4
IFI 1982–10	3PZ40–317	.400 .387	.251 .233	.025	.086	.224	.206	4
IFI 1982–12	3PZ40–318	.435 .422	.288 .270	.025	.087	.261	.243	4

REVISION | ISSUED 9–17–92

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TITLE: **POZIDRIV® IFI & DIN STDS. METRIC PAN & RAISED CHEESE HEAD RECESS DIMENSIONS ONLY**

DRAWN: J. GRADY	DATE: 9–11–92	DRAWING NUMBER **PZHS-31**
CHECKED: J. GRADY	DATE: 9–17–92	SHEET 2 OF 2

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

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OPTIONAL HEAD
ENLARGED VIEW

BASIC PART NO.	THREAD	A THEO. DIA.	D DIA. BEFORE PLATE	D DIA. AFTER PLATE	C RAD.	H REF.	K DIA.	L	P MAX.	R MAX.	T REF.	U REF.	(F) MIN. TORQUE IN/LBS	Z (b)	REC. PEN.	REC. and bit size
PIC239-3	10-32NF-3A	.3016 .2966	.1887 .1881	.1895 .1885	.020 .010	.046	.169 .156	.015 .005	.101	.010	.276	.062	50	.0040	.086 .068	2
PIC239-4	1/4-28UNF-3A	.3948 .3898	.2487 .2481	.2495 .2485	.020 .010	.060	.184 .171	.015 .005	.116	.010	.316	.071	90	.0030	.101 .083	2
PIC239-5	5/16-24UNF-3A	.4739 .4689	.3112 .3106	.3120 .3110	.025 .010	.067	.247 .234	.015 .005	.135	.011	.375	.083	175	.0030	.114 .096	3
PIC239-6	3/8-24UNF-3A	.5604 .5554	.3737 .3731	.3745 .3735	.030 .015	.077	.317 .304	.015 .005	.172	.013	.391	.083	250	.0025	.145 .127	4
PIC239-7	7/16-20UNF-3A	.6680 .6620	.4362 .4356	.4370 .4360	.030 .015	.096	.342 .329	.022 .005	.196	.015	.453	.100	550	.0025	.170 .152	4
PIC239-8	1/2-20UNF-3A	.7540 .7480	.4987 .4981	.4995 .4985	.030 .015	.105	.366 .353	.022 .005	.221	.017	.453	.100	900	.0020	.194 .176	4
PIC239-9	9/16-18UNF-3A	.8380 .8310	.5607 .5601	.5615 .5605	.030 .015	.114	.393 .380	.025 .005	.248	.019	.511	.110	1440	.0020	.222 .204	4
PIC239-10	5/8-18UNF-3A	.9250 .9180	.6232 .6226	.6240 .6230	.030 .015	.125	.409 .396	.025 .005	.265	.021	.543	.110	1600	.0020	.238 .220	4

(F) LISTED VALUES TO BE VERIFIED IN PRODUCTION

REVISION	REISSUED JAN. 19, 1979	ECO# 136 SEPT. 21, 2001

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TITLE: **POZIDRIV® RECESS SHEAR BOLT 100° FLAT RIVET HEAD CLOSE TOLERANCE SHORT THREAD**

DRAWN: L.P. & J.C.	DATE: 08/16/66	DRAWING NUMBER **PIC 239**
CHECKED: L.P.	DATE: 08/19/66	SHEET 1 OF 3

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

MATERIAL	ALLOY STEEL PER NAS 498
HEAT TREATMENT	160,000–180,000 PSI UTS PER MIL–H–6875
FINISH	CADMIUM PLATE QQ–P–416, TYPE II, CLASS 3. TYPE 1 PLATING DESIGNATED BY "W", SEE CODE.
CODE	DASH NUMBER DESIGNATES GRIP AND LENGTH. "W" AFTER DASH NUMBER DESIGNATES TYPE I PLATING.
EXAMPLE	PIC239 – 4 –8 = 1/4 DIA BOLT, .500 GRIP, TYPE II PLATING PIC239 – 5 –10 = 5/16 DIA BOLT, .625 GRIP, TYPE II PLATING PIC239 – 5 –10W = 5/16 DIA BOLT, .625 GRIP, TYPE 1 PLATING

NOTES

(a) CONCENTRICITY
CONICAL SURFACE OF HEAD AND "D" DIAMETER WITHIN .005 TIR.
RECESS TO SHANK WITHIN .016 TIR THRU 1/4 SIZE
WITHIN .024 TIR ABOVE 1/4 SIZE

(b) SHANK STRAIGHTNESS WITHIN "Z" VALUES TIR PER INCH OF LENGTH

(c) GRIP LENGTH FROM THE TOP OF HEAD TO END OF FULL CYLINDRICAL PORTION OF SHANK

(d) POZIDRIV® BOLTS SHALL WITHSTAND MINIMUM TORQUE VALUES LISTED WITHOUT DAMAGE TO RECESS OR DRIVER WHEN TESTED IN THE INSTALLATION DIRECTION WITH MAXIMUM END LOAD OF 20 POUNDS AND IN THE REMOVAL DIRECTION WITH MAXIMUM END LOAD OF 40 POUNDS. REFER TO PZD–9 FOR DRIVER BIT.

(e) BOLTS SHALL BE FREE FROM BURRS AND SHARP EDGES

DIMENSIONS IN INCHES

PROCUREMENT SPECIFICATIONS NAS 498

REVISION	REISSUED JAN. 19, 1979	REVISE NOTE d NOV. 17, 1999

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TITLE: **POZIDRIV® RECESS SHEAR BOLT 100° FLAT RIVET HEAD CLOSE TOLERANCE SHORT THREAD**

DRAWN:	DATE:	DRAWING NUMBER
L.P. & J.C.	08/16/66	**PIC 239**
CHECKED: L.P.	DATE: 08/19/66	SHEET 2 OF 3

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

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DASH NUMBER	NOM. GRIP	LENGTH								NOM. GRIP
		PIC–3	PIC–4	PIC–5	PIC–6	PIC–7	PIC–8	PIC–9	PIC–10	
1	.062	.338	.378	.437	.453	.515	.515	.573	.605	.062
2	.125	.401	.441	.500	.516	.578	.578	.636	.668	.125
3	.188	.464	.504	.563	.579	.641	.641	.699	.731	.188
4	.250	.526	.566	.625	.641	.703	.703	.761	.793	.250
5	.312	.588	.628	.687	.703	.765	.765	.823	.855	.312
6	.375	.651	.691	.750	.766	.828	.828	.886	.918	.375
7	.438	.714	.754	.813	.829	.891	.891	.949	.981	.438
8	.500	.776	.816	.875	.891	.953	.953	1.011	1.043	.500
9	.562	.838	.878	.937	.953	1.015	1.015	1.073	1.105	.562
10	.625	.901	.941	1.000	1.016	1.073	1.078	1.136	1.168	.625
11	.688	.964	1.004	1.063	1.079	1.141	1.141	1.199	1.231	.688
12	.750	1.026	1.066	1.125	1.141	1.203	1.203	1.261	1.291	.750
13	.812	1.088	1.128	1.187	1.203	1.265	1.265	1.323	1.355	.812
14	.875	1.151	1.191	1.250	1.266	1.328	1.328	1.386	1.418	.875
15	.938	1.214	1.254	1.313	1.329	1.391	1.391	1.449	1.481	.938
16	1.000	1.276	1.316	1.375	1.391	1.453	1.453	1.511	1.543	1.000
17	1.062	1.338	1.378	1.437	1.453	1.515	1.515	1.573	1.605	1.062
18	1.125	1.401	1.441	1.500	1.516	1.578	1.578	1.636	1.668	1.125
19	1.188	1.464	1.504	1.563	1.579	1.641	1.641	1.699	1.731	1.188
20	1.250	1.526	1.566	1.625	1.641	1.703	1.703	1.761	1.793	1.250
21	1.312	1.588	1.628	1.687	1.703	1.765	1.765	1.823	1.855	1.312
22	1.375	1.651	1.691	1.750	1.766	1.828	1.828	1.886	1.918	1.375
23	1.438	1.714	1.754	1.813	1.829	1.891	1.891	1.949	1.981	1.438
24	1.500	1.776	1.816	1.875	1.891	1.953	1.953	2.011	2.043	1.500
25	1.562	1.838	1.878	1.937	1.953	2.015	2.015	2.073	2.105	1.562
26	1.625	1.901	1.941	2.000	2.016	2.078	2.078	2.136	2.168	1.625
27	1.688	1.964	2.004	2.063	2.079	2.141	2.141	2.199	2.231	1.688
28	1.750	2.026	2.066	2.125	2.141	2.203	2.203	2.261	2.293	1.750
29	1.812	2.088	2.128	2.187	2.203	2.265	2.265	2.323	2.355	1.812
30	1.875	2.151	2.191	2.250	2.266	2.328	2.328	2.386	2.418	1.875
31	1.938	2.214	2.254	2.313	2.329	2.391	2.391	2.449	2.481	1.938
32	2.000	2.276	2.316	2.375	2.391	2.453	2.453	2.511	2.543	2.000
34	2.125	2.401	2.441	2.500	2.516	2.578	2.578	2.636	2.668	2.125
36	2.250	2.526	2.566	2.625	2.641	2.703	2.703	2.761	2.793	2.250
38	2.375	2.651	2.691	2.750	2.766	2.828	2.828	2.886	2.918	2.375
40	2.500	2.776	2.816	2.875	2.891	2.953	2.953	3.011	3.043	2.500
42	2.625	2.901	2.941	3.000	3.016	3.078	3.078	3.136	3.168	2.625
44	2.750	3.026	3.066	3.125	3.141	3.203	3.203	3.261	3.293	2.750
46	2.875	3.151	3.191	3.250	3.266	3.328	3.328	3.386	3.418	2.875
48	3.000	3.276	3.316	3.375	3.391	3.453	3.453	3.511	3.543	3.000
50	3.125	3.401	3.441	3.500	3.516	3.578	3.578	3.636	3.668	3.125
52	3.250	3.526	3.566	3.625	3.641	3.703	3.703	3.761	3.793	3.250
54	3.375	3.651	3.691	3.750	3.766	3.828	3.828	3.886	3.918	3.375
56	3.500	3.776	3.816	3.875	3.891	3.953	3.953	4.011	4.043	3.500
58	3.625	3.901	3.941	4.000	4.016	4.078	4.078	4.136	4.168	3.625
60	3.750	4.026	4.066	4.125	4.141	4.203	4.203	4.261	4.293	3.750
62	3.875	4.151	4.191	4.250	4.266	4.328	4.328	4.386	4.418	3.875
64	4.000	4.276	4.316	4.375	4.391	4.453	4.453	4.511	4.543	4.000
66	4.125	4.401	4.441	4.500	4.516	4.578	4.578	4.636	4.668	4.125
68	4.250	4.526	4.566	4.625	4.641	4.703	4.703	4.761	4.793	4.250
70	4.375	4.651	4.691	4.750	4.766	4.828	4.828	4.886	4.918	4.375
72	4.500	4.776	4.816	4.875	4.891	4.953	4.953	5.011	5.043	4.500
74	4.625	4.901	4.941	5.000	5.016	5.078	5.078	5.136	5.168	4.625
76	4.750	5.026	5.066	5.125	5.141	5.203	5.203	5.261	5.293	4.750
78	4.875	5.151	5.191	5.250	5.266	5.328	5.328	5.386	5.418	4.875
80	5.000	5.276	5.316	5.375	5.391	5.453	5.453	5.511	5.543	5.000
82	5.125	5.401	5.441	5.500	5.516	5.578	5.578	5.636	5.668	5.125
84	5.250	5.526	5.566	5.625	5.641	5.703	5.703	5.761	5.793	5.250
86	5.375	5.651	5.691	5.750	5.766	5.828	5.828	5.886	5.918	5.375
88	5.500	5.776	5.816	5.875	5.891	5.953	5.953	6.011	6.043	5.500
90	5.625	5.901	5.941	6.000	6.016	6.078	6.078	6.136	6.168	5.625
92	5.750	6.026	6.066	6.125	6.141	6.203	6.203	6.261	6.293	5.750
94	5.875	6.151	6.191	6.250	6.266	6.328	6.328	6.386	6.418	5.875
96	6.000	6.276	6.316	6.375	6.391	6.453	6.453	6.511	6.543	6.000

DASH NO. INDICATES GRIP LENGTH IN .062 INCREMENTS. INTERMEDIATE OR LONGER LENGTHS MAY BE SPECIFIED BY USE OF WHOLE DASH NOS. ONLY.

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TITLE: **POZIDRIV® RECESS SHEAR BOLT 100° FLAT RIVET HEAD CLOSE TOLERANCE SHORT THREAD**

DRAWN: L.P. & J.C.	DATE: 08/16/66	DRAWING NUMBER **PIC 239**
CHECKED: L.P.	DATE: 08/19/66	SHEET 3 OF 3

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

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ENLARGED VIEW OF HEAD

BASIC PART NUMBER	THREAD	A DIA. REF.	B ABS. MIN. DIA.	D DIA. BEFORE PLATE	D DIA. AFTER PLATE	H REF.	L	R RAD.	T REF.	U REF.	K DIA.	P MAX.	E DIA.	M
PIC333	10−32NF−3A	.385 .376	.328	.1886 .1881	.1894 .1885	.080	.020 .010	.030 .015	.406	.031	.184 .171	.116	.080 .070	.139
PIC334	1/4−28UNF−3A	.507 .497	.449	.2484 .2479	.2492 .2483	.106	.020 .010	.030 .015	.469	.031	.247 .234	.135	.086 .076	.157
PIC335	5/16−24UNF−3A	.635 .625	.577	.3109 .3104	.3117 .3108	.133	.020 .010	.030 .015	.531	.047	.317 .304	.172	.086 .076	.172
PIC336	3/8−24UNF−3A	.762 .752	.704	.3734 .3729	.3742 .3733	.160	.020 .010	.030 .015	.641	.047	.342 .329	.196	.116 .106	.203
PIC337	7/16−20UNF−3A	.890 .880	.832	.4359 .4354	.4367 .4358	.188	.020 .010	.030 .015	.656	.047	.366 .353	.221	.116 .106	.172
PIC338	1/2−20UNF−3A	1.017 1.007	.959	.4983 .4978	.4991 .4982	.215	.020 .010	.030 .015	.781	.047	.393 .380	.248	.116 .106	.172
PIC339	9/16−18UNF−3A	1.145 1.135	1.087	.5608 .5603	.5616 .5607	.242	.020 .010	.030 .015	.906	.062	.429 .406	.280	.151 .141	.250
PIC340	5/8−18UNF−3A	1.272 1.262	1.214	.6232 .6226	.6240 .6231	.270	.020 .010	.030 .015	.953	.062	.499 .476	.266	.151 .141	.219

PZCN−130
FEB. 25, 1970

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TITLE: **POZIDRIV® RECESS BOLT, 100° CLOSE TOLERANCE HEAD HIGH STRENGTH**

DRAWN: L. P. & J. C.	DATE: 8−9−66	DRAWING NUMBER **PIC 333 THRU 340**
CHECKED: L. P.	DATE: 8−19−66	SHEET 1 OF 3

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
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BASIC PART NO.	W (d) HEAD PROTRUSION	X (d) GAGE CIRCLE DIA.	Y (a)	Z (b)	RECESS GAGE PENETRATION	RATED STRENGTH	
						SINGLE SHEAR LB	TENSILE LB.
PIC333	.0290 .0263	.3147 .3143	.0045	.0040	.101 .083	2,620	2,700
PIC334	.0342 .0316	.4245 .4241	.0045	.0030	.114 .096	4,650	5,000
PIC335	.0395 .0370	.5389 .5385	.0045	.0030	.145 .127	7,300	8,200
PIC336	.0450 .0426	.6532 .6528	.0045	.0025	.170 .152	10,500	12,700
PIC337	.0503 .0481	.7676 .7672	.0060	.0025	.194 .176	14,300	17,100
PIC338	.0557 .0537	.8820 .8816	.0060	.0020	.222 .204	18,650	23,400
PIC339	.0611 .0592	.9964 .9960	.0060	.0020	.253 .235	23,600	29,800
PIC340	.0665 .0647	1.1108 1.1104	.0060	.0020	.228 .207	29,150	38,000

CODE: ADD −5 AFTER LAST DASH NUMBER TO DESIGNATE BOLT WITH GRIP AND LENGTH .062 LONGER THAN DESIGNATED BY LENGTH DASH NUMBER ALONG.

ADD "D" AFTER BASIC PART NUMBER TO DESIGNATE BOLT WITH COTTER PIN HOLE.

EXAMPLE OF PART NUMBER: PIC 334−10 = 1/4−28 STEEL BOLT, .562 GRIP, POZIDRIV® RECESS, WITHOUT COTTER PIN HOLE.

MATERIAL: STEEL IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.
HEAT TREAT 160,000−180,000 PSI TENSILE STRENGTH.

FINISH: CADMIUM PLATING PER QQ−P−416, TYPE II, CLASS3.

TOLERANCES: UNLESS OTHERWISE SPECIFIES; LINEAR ±.010, ANGULAR ±1°.

NOTES: (a) CONCENTRICITY: "A" AND "D" DIAMETER WITHIN .003 TIR.
"D" AND THREAD PITCH DIAMETER WITHIN "Y" VALUES TIR.
RECESS TO SHANK WITHIN .016 TIR THRU 1/4 SIZE.
" " " WITHIN .024 TIR ABOVE 1/4 SIZE.

(b) SHANK STRAIGHTNESS: WITHIN "Z" VALUES TIR PER INCH OF LENGTH.

(c) GRIP LENGTH: FROM THE TOP OF HEAD TO END OF FULL CYLINDRICAL PORTION OF SHANK.

(d) REFER TO NAS518 AND NAS519 FOR FLUSHNESS GAGING DETAILS.

(e) BOLTS SHALL BE FREE FROM BURRS AND SHARP EDGES.

(f) COTTER PIN HOLE CENTERLINE: WITHIN .010 AND NORMAL WITHIN 2° OF BOLTS CENTERLINE.

PROCURMENT SPECIFICATION: NAS 498 SUPPLEMENTED BY PARAGRAPHS 4.4.2.2.1.1. OF MIL−B−7838 AND TENSILE STRENGTH INSPECTION VALUES AS TABULATED ABOVE.

PZCN−130 FEB. 25, 1970

PZCN−83 OCT. 04, 1966

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TITLE: **POZIDRIV® RECESS BOLT, 100° CLOSE TOLERANCE HEAD HIGH STRENGTH**

DRAWN: L. P. & J. C.	DATE: 8−9−66	DRAWING NUMBER **PIC 333 THRU 340**
CHECKED: L. P.	DATE: 8−19−66	SHEET 2 OF 3

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774−396−6190 FAX: 508−966−2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

DASH NO.	PIC–333		PIC–334		PIC–335		PIC–336		PIC–337		PIC–338		PIC–339		PIC–340	
	LENGTH	GRIP	LENGTH	GRIP	LENGTH	GRIP	LENGTH	GRIP	LENGTH	GRIP	LENGTH	GRIP	LENGTH	GRIP	LENGTH	GRIP
–4	.531	.125														
–5	.656	.250	.657	.188	.719	.188										
–6	.781	.375	.781	.312	.843	.312	.829	.188								
–7	.906	.500	.907	.438	.969	.438	.953	.312	.968	.312						
–10	1.031	.625	1.031	.562	1.093	.562	1.079	.438	1.094	.438	1.093	.312	1.156	.250		
–11	1.156	.750	1.157	.688	1.219	.688	1.203	.562	1.218	.562	1.219	.438	1.281	.375	1.265	.312
–12	1.281	.875	1.281	.812	1.343	.812	1.329	.688	1.344	.688	1.343	.562	1.406	.500	1.391	.438
–13	1.406	1.000	1.407	.938	1.469	.938	1.453	.812	1.468	.812	1.469	.688	1.531	.625	1.515	.562
–14	1.531	1.125	1.531	1.062	1.593	1.062	1.579	.938	1.594	.938	1.593	.812	1.656	.750	1.641	.688
–15	1.656	1.250	1.657	1.188	1.719	1.188	1.703	1.062	1.718	1.062	1.719	.938	1.781	.875	1.765	.812
–16	1.781	1.375	1.781	1.312	1.843	1.312	1.829	1.188	1.844	1.188	1.843	1.062	1.906	1.000	1.891	.938
–17	1.906	1.500	1.907	1.438	1.969	1.438	1.953	1.312	1.968	1.312	1.969	1.188	2.031	1.125	2.015	1.062
–20	2.031	1.625	2.031	1.562	2.093	1.562	2.079	1.438	2.094	1.438	2.093	1.312	2.156	1.250	2.141	1.188
–21	2.156	1.750	2.157	1.688	2.219	1.688	2.203	1.562	2.218	1.562	2.219	1.438	2.181	1.375	2.265	1.312
–22	2.281	1.875	2.281	1.812	2.343	1.812	2.329	1.688	2.344	1.688	2.343	1.562	2.406	1.500	2.391	1.438
–23	2.406	2.000	2.407	1.938	2.469	1.938	2.453	1.812	2.468	1.812	2.469	1.688	2.531	1.625	2.515	1.562
–24	2.531	2.125	2.531	2.062	2.593	2.062	2.579	1.938	2.594	1.938	2.593	1.812	2.656	1.750	2.641	1.688
–25	2.656	2.250	2.657	2.188	2.719	2.188	2.703	2.062	2.718	2.062	2.719	1.938	2.781	1.875	2.765	1.812
–26	2.781	2.375	2.781	2.312	2.843	2.312	2.829	2.188	2.844	2.188	2.843	2.062	2.906	2.000	2.891	1.938
–27	2.906	2.500	2.907	2.438	2.969	2.438	2.953	2.312	2.968	2.312	2.969	2.188	3.031	2.125	3.015	2.062
–30	3.031	2.625	3.031	2.562	3.093	2.562	3.079	2.438	3.094	2.438	3.093	2.312	3.156	2.250	3.141	2.188
–31	3.156	2.750	3.157	2.688	3.219	2.688	3.203	2.562	3.218	2.562	3.219	2.438	3.281	2.375	3.265	2.312
–32	3.281	2.875	3.281	2.812	3.343	2.812	3.329	2.688	3.344	2.688	3.343	2.562	3.406	2.500	3.391	2.438
–33	3.406	3.000	3.407	2.938	3.469	2.938	3.453	2.812	3.468	2.812	3.469	2.688	3.531	2.625	3.515	2.562
–34	3.531	3.125	3.531	3.062	3.593	3.062	3.579	2.938	3.594	2.938	3.593	2.812	3.656	2.750	3.641	2.688
–35	3.656	3.250	3.657	3.188	3.719	3.188	3.703	3.062	3.718	3.062	3.719	2.938	3.781	2.875	3.765	2.812
–36	3.781	3.375	3.781	3.312	3.843	3.312	3.829	3.188	3.844	3.188	3.843	3.062	3.906	3.000	3.891	2.938
–37	3.906	3.500	3.907	3.438	3.969	3.438	3.953	3.312	3.968	3.312	3.969	3.188	4.031	3.125	4.015	3.062
–40	4.031	3.625	4.031	3.562	4.093	3.562	4.079	3.438	4.094	3.438	4.093	3.312	4.156	3.250	4.141	3.188
–41	4.156	3.750	4.157	3.688	4.219	3.688	4.203	3.562	4.218	3.562	4.219	3.438	4.281	3.375	4.265	3.312
–42	4.281	3.875	4.281	3.812	4.343	3.812	4.329	3.688	4.344	3.688	4.343	3.562	4.406	3.500	4.391	3.438
–43	4.406	4.000	4.407	3.938	4.469	3.938	4.453	3.812	4.468	3.812	4.469	3.688	4.531	3.625	4.515	3.562
–44	4.531	4.125	4.531	4.062	4.593	4.062	4.579	3.938	4.594	3.938	4.593	3.812	4.656	3.750	4.641	3.688
–45	4.656	4.250	4.657	4.188	4.719	4.188	4.703	4.062	4.718	4.062	4.719	3.938	4.781	3.875	4.765	3.812
–46	4.781	4.375	4.781	4.312	4.843	4.312	4.829	4.188	4.844	4.188	4.843	4.062	4.906	4.000	4.891	3.938
–47	4.906	4.500	4.907	4.438	4.969	4.438	4.953	4.312	4.968	4.312	4.969	4.188	5.031	4.125	5.015	4.062
–50	5.031	4.625	5.031	4.562	5.093	4.562	5.079	4.438	5.094	4.438	5.093	4.312	5.156	4.250	5.141	4.188
–51	5.156	4.750	5.157	4.688	5.219	4.688	5.203	4.562	5.218	4.562	5.219	4.438	5.281	4.375	5.265	4.312
–52	5.281	4.875	5.281	4.812	5.343	4.812	5.329	4.688	5.344	4.688	5.343	4.562	5.406	4.500	5.391	4.438
–53	5.406	5.000	5.407	4.938	5.469	4.938	5.453	4.812	5.468	4.812	5.469	4.688	5.531	4.625	5.515	4.562
–54	5.531	5.125	5.531	5.062	5.593	5.062	5.579	4.938	5.594	4.938	5.593	4.812	5.656	4.750	5.641	4.688
–55	5.656	5.250	5.657	5.188	5.719	5.188	5.703	5.062	5.718	5.062	5.719	4.938	5.781	4.875	5.765	4.812
–56	5.781	5.375	5.781	5.312	5.843	5.312	5.829	5.188	5.844	5.188	5.843	5.062	5.906	5.000	5.891	4.938
–57	5.906	5.500	5.907	5.438	5.969	5.438	5.953	5.312	5.968	5.312	5.969	5.188	6.031	5.125	6.015	5.062
–60	6.031	5.625	6.031	5.562	6.093	5.562	6.079	5.438	6.094	5.438	6.093	5.312	6.156	5.250	6.141	5.188
–61	6.156	5.750	6.157	5.688	6.219	5.688	6.203	5.562	6.218	5.562	6.219	5.438	6.281	5.375	6.265	5.312
–62	6.281	5.875	6.281	5.812	6.343	5.812	6.329	5.688	6.344	5.688	6.343	5.562	6.406	5.500	6.391	5.438
–63	6.406	6.000	6.407	5.938	6.469	5.938	6.453	5.812	6.468	5.812	6.469	5.688	6.531	5.625	6.515	5.562
–64	6.531	6.125	6.531	6.062	6.593	6.062	6.579	5.938	6.594	5.938	6.593	5.812	5.656	5.750	6.641	5.688
–65	6.656	6.250	6.657	6.188	6.719	6.188	6.703	6.062	6.718	6.062	6.719	5.938	6.781	5.875	6.765	5.812
–66	6.781	6.375	6.781	6.312	6.843	6.312	6.829	6.188	6.844	6.188	6.843	6.062	6.906	6.000	6.891	5.938
–67	6.906	6.500	6.907	6.438	6.969	6.438	6.953	6.312	6.968	6.312	6.969	6.188	7.031	6.125	7.015	6.062
–70	7.031	6.625	7.031	6.562	7.093	6.562	7.079	6.438	7.094	6.438	7.093	6.312	7.156	6.250	7.141	6.188
–71	7.156	6.750	7.157	6.688	7.219	6.688	7.203	6.562	7.218	6.562	7.219	6.438	7.281	6.375	7.265	6.312
–72	7.281	6.875	7.281	6.812	7.343	6.812	7.329	6.688	7.344	6.688	7.343	6.562	7.406	6.500	7.391	6.438
–73	7.406	7.000	7.407	6.938	7.469	6.938	7.453	6.812	7.468	6.812	7.469	6.688	7.531	6.625	7.515	6.562
–74	7.531	7.125	7.531	7.062	7.593	7.062	7.579	6.938	7.594	6.938	7.593	6.812	7.656	6.750	7.641	6.688
–75	7.656	7.250	7.657	7.188	7.719	7.188	7.703	7.062	7.718	7.062	7.719	6.938	7.781	6.875	7.765	6.812
–76	7.781	7.375	7.781	7.312	7.843	7.312	7.829	7.188	7.844	7.188	7.843	7.062	7.906	7.000	7.891	6.938
–77	7.906	7.500	7.907	7.438	7.969	7.438	7.953	7.312	7.968	7.312	7.969	7.188	8.031	7.125	8.015	7.062
–80	8.031	7.625	8.031	7.562	8.093	7.562	8.079	7.438	8.094	7.438	8.093	7.312	8.156	7.250	8.141	7.188

PZCN–130
FEB. 25, 1970

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TITLE: **POZIDRIV® RECESS BOLT, 100° CLOSE TOLERANCE HEAD HIGH STRENGTH**

DRAWN: L. P. & J. C.	DATE: 8–9–66	DRAWING NUMBER **PIC 333 THRU 340**
CHECKED: L. P.	DATE: 8–19–66	SHEET 3 OF 3

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

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ENLARGED VIEW OF HEAD

BASIC PART NO.	THREAD	A DIA. REF	A ABS. MIN. DIA.	D DIA. BEFORE PLATE	D DIA. AFTER PLATE	H REF.	L	R RAD.	T REF.	U REF.	K DIS.	P MAX.	E DIS.	M
PIC1202	8−32UNC−3A	.337 .328	.280	.1627 .1621	.1635 .1625	.068	.020 .010	.020 .010	.276	.016	.169 .156	.101	−	−
PIC1203	10−32UNF−3A	.385 .376	.328	.1887 .1881	.1895 .1885	.080	.020 .010	.020 .010	.276	.016	.184 .171	.116	.070	.117
PIC1204	1/4−24UNF−3A	.507 .497	.449	.2487 .2481	.2495 .2485	.106	.020 .010	.020 .010	.316	.018	.247 .234	.135	.076	.116
PIC1205	5/16−24UNF−3A	.635 .625	.577	.3112 .3106	.3120 .3110	.133	.020 .010	.025 .010	.375	.021	.317 .304	.172	.076	.119
PIC1206	3/8−24UNF−3A	.762 .752	.704	.3737 .3731	.3745 .3735	.160	.020 .010	.030 .015	.391	.021	.342 .329	.196	.106	.120
PIC1207	7/16−20UNF−3A	.890 .880	.832	.4362 .4356	.4370 .4360	.188	.020 .010	.030 .015	.453	.025	.366 .353	.221	.106	.124
PIC1208	1/2−20UNF−3A	1.017 1.007	.959	.4987 .4981	.4995 .4985	.215	.020 .010	.030 .015	.453	.025	.393 .380	.248	.106	.123
PIC1209	5/8−18UNF−3A	1.145 1.135	1.087	.5607 .5601	.5615 .5605	.242	.020 .010	.030 .015	.511	.028	.429 .406	.280	.141	.124
PIC1210	5/8−18UNF−3A	1.272 1.262	1.214	.6232 .6226	.6240 .6230	.270	.020 .010	.030 .015	.543	.028	.499 .476	.266	.141	.124

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TITLE: **POZIDRIV® RECESS BOLT, 100° CLOSE TOLERANCE HEAD & SHANK, 160,000 PSI SHORT THREAD**

DRAWN: L. P. & J. C.	DATE: 8−12−66	DRAWING NUMBER **PIC1202 THRU 1210**
CHECKED: L. P.	DATE: 8−19−66	SHEET 1 OF 3

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774−396−6190 FAX: 508−966−2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

BASIC PART NO.	W (d) HEAD PROTRUSION	X (d) GAGE CIRCLE DIA.	Y (a)	Z (b)	RECESS GAGE PENETRATION	ULT. T.S. LBS. MIN.
PIC1202	.0268 .0240	.2671 .2667	.0045	.0040	.086 .068	1,740
PIC1203	.0290 .0263	.3147 .3143	.0045	.0040	.101 .083	2,490
PIC1204	.0342 .0316	.4245 .4241	.0045	.0030	.114 .096	4,520
PIC1205	.0395 .0370	.5389 .5385	.0045	.0030	.145 .127	7,240
PIC1206	.0450 .0426	.6532 .6528	.0060	.0025	.170 .152	10,950
PIC1207	.0503 .0481	.7676 .7672	.0060	.0025	.194 .176	14,800
PIC1208	.0557 .0537	.8820 .8816	.0060	.0020	.222 .204	19,950
PIC1209	.0611 .0592	.9964 .9960	.0060	.0020	.253 .235	25,300
PIC1210	.0665 .0647	1.1108 1.1104	.0060	.0020	.228 .207	31,950

MATERIAL: ALLOY STEEL PER NAS498.

HEAT TREATMENT: 160,000–180,000 PSI UTS PER MIL–H–6875.

FINISH: CADMIUM PLATING PER QQ–P–416, TYPE II, CLASS 3 OR TYPE I, CLASS 3.
TYPE I PLATING DESIGNATED BY 'W', SEE CODE.

CODE: DASH NUMBER DESIGNATES GRIP AND LENGTH (SEE SHEET THREE).
"W" AFTER DASH NUMBER DESIGNATES TYPE I PLATING.
"D" AFTER DASH NUMBER DESIGNATES DRILLED SHANK.
IF MORE THAN ONE CODE LETTER IS USED IN ONE PART NUMBER, ARRANGE LETTERS ALPHABETICALLY.

EXAMPLE: PIC1204–B, 1/4 DIA BOLT, .500 GRIP, TYPE II PLATING.
PIC1205–10, 5/16 DIA BOLT, .625 GRIP, TYPE II PLATING.
PIC1205–10W, 5/16 DIA BOLT, .625 GRIP, TYPE I PLATING.
PIC1205–10D, 5/16 DIA BOLT, .625 GRIP, DRILLED SHANK, TYPE II PLATING.

NOTES: (a) CONCENTRICITY: "D" AND THREAD PITCH DIAMETERS WITHIN "Y" VALUES TIR.
CONICAL SURFACE OF HEAD AND "D" DIA WITHIN .005 TIR.
RECESS TO SHANK WITHIN .016 TIR THRU 1/4 SIZE.
WITHIN .024 TIR ABOVE 1/4 SIZE.

(b) SHANK STRAIGHTNESS: WITHIN "Z" VALUES TIR PER INCH OF LENGTH.

(c) GRIP LENGTH: FROM THE TOP OF HEAD TO END OF FULL CYLINDRICAL PORTION OF SHANK.

(d) REFER TO NAS518 AND NAS519 FOR FLUSHNESS GAGING DETAILS.

(e) BOLTS SHALL BE FREE FROM BURRS AND SHARP EDGES.

(f) COTTER PIN HOLE CENTERLINE: WITHIN .010 AND NORMAL WITHIN 2° OF BOLTS CENTERLINE.

DIMENSIONS IN INCHES:
PROCURMENT SPECIFICATION: NAS498: EXCEPT FOR TENSION LOAD VALUES TABULATED ABOVE

REVISION		
	PZCN–83	OCT. 04, 1966
	PZCN–130	FEB. 25, 1970

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TITLE: **POZIDRIV® RECESS BOLT, 100° CLOSE TOLERANCE HEAD & SHANK, 160,000 PSI SHORT THREAD**

DRAWN: L. P. & J. C.	DATE: 8–12–66	DRAWING NUMBER **PIC1202 THRU 1210**
CHECKED: L. P.	DATE: 8–19–66	SHEET 2 OF 3

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

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DASH NUMBER	GRIP	LENGTH								
		PIC1202	PIC1203	PIC1204	PIC1205	PIC1206	PIC1207	PIC1208	PIC1209	PIC1210
1	.062	.338	.338	.378	.437	.453	.515			
2	.125	.401	.401	.441	.500	.516	.578			
3	.188	.464	.464	.504	.563	.579	.641			
4	.250	.526	.526	.566	.625	.641	.703	.703		
5	.312	.588	.588	.628	.687	.703	.765	.765	.823	.855
6	.375	.651	.651	.691	.750	.766	.828	.828	.886	.918
7	.438	.714	.714	.754	.813	.829	.891	.891	.949	.981
8	.500	.776	.776	.816	.875	.891	.953	.953	1.011	1.043
9	.562	.838	.838	.878	.937	.953	1.015	1.015	1.073	1.105
10	.625	.901	.901	.941	1.000	1.016	1.073	1.079	1.136	1.168
11	.688	.964	.964	1.004	1.063	1.079	1.141	1.141	1.199	1.231
12	.750	1.026	1.026	1.066	1.125	1.141	1.203	1.203	1.261	1.291
13	.812	1.088	1.088	1.128	1.187	1.203	1.265	1.265	1.323	1.355
14	.875	1.151	1.151	1.191	1.250	1.266	1.328	1.328	1.386	1.418
15	.938	1.214	1.214	1.254	1.313	1.329	1.391	1.391	1.449	1.481
16	1.000	1.276	1.276	1.316	1.375	1.391	1.453	1.453	1.511	1.543
17	1.062	1.338	1.338	1.378	1.437	1.453	1.515	1.515	1.573	1.605
18	1.125	1.401	1.401	1.441	1.500	1.516	1.578	1.578	1.636	1.668
19	1.188	1.464	1.464	1.504	1.563	1.579	1.641	1.641	1.699	1.731
20	1.250	1.526	1.526	1.566	1.625	1.641	1.703	1.703	1.761	1.793
21	1.312	1.588	1.588	1.628	1.687	1.703	1.765	1.765	1.823	1.855
22	1.375	1.651	1.651	1.691	1.750	1.766	1.828	1.828	1.886	1.918
23	1.438	1.714	1.714	1.754	1.813	1.829	1.891	1.891	1.949	1.981
24	1.500	1.776	1.776	1.816	1.875	1.891	1.953	1.953	2.011	2.043
25	1.562	1.838	1.838	1.878	1.937	1.953	2.015	2.015	2.073	2.105
26	1.625	1.901	1.901	1.941	2.000	2.016	2.078	2.078	2.136	2.168
27	1.688	1.964	1.964	2.004	2.063	2.079	2.141	2.141	2.199	2.231
28	1.750	2.026	2.026	2.066	2.125	2.141	2.203	2.203	2.261	2.291
29	1.812	2.088	2.088	2.128	2.187	2.203	2.265	2.265	2.323	2.355
30	1.875	2.151	2.151	2.191	2.250	2.266	2.328	2.328	2.386	2.418
31	1.938	2.214	2.214	2.254	2.313	2.329	2.391	2.391	2.449	2.481
32	2.000	2.276	2.276	2.316	2.375	2.391	2.453	2.453	2.511	2.543
34	2.125	2.401	2.401	2.441	2.500	2.516	2.578	2.578	2.636	2.668
36	2.250	2.526	2.526	2.566	2.625	2.641	2.703	2.703	2.761	2.793
38	2.375	2.651	2.651	2.691	2.750	2.766	2.828	2.828	2.886	2.918
40	2.500	2.776	2.776	2.816	2.875	2.891	2.953	2.953	3.011	3.043
42	2.625	2.901	2.901	2.941	3.000	3.016	3.078	3.078	3.136	3.168
44	2.750	3.026	3.026	3.066	3.125	3.141	3.203	3.203	3.261	3.291
46	2.875	3.151	3.151	3.191	3.250	3.266	3.328	3.328	3.386	3.418
48	3.000	3.276	3.276	3.316	3.375	3.391	3.453	3.453	3.511	3.543
50	3.125	3.401	3.401	3.441	3.500	3.516	3.578	3.578	3.636	3.668
52	3.250	3.526	3.526	3.566	3.625	3.641	3.703	3.703	3.761	3.793
54	3.375	3.651	3.651	3.691	3.750	3.766	3.828	3.828	3.886	3.918
56	3.500	3.776	3.776	3.816	3.875	3.891	3.953	3.953	4.011	4.043
58	3.625	3.901	3.901	3.941	4.000	4.016	4.078	4.078	4.136	4.168
60	3.750	4.026	4.026	4.066	4.125	4.141	4.203	4.203	4.261	4.291
62	3.875	4.151	4.151	4.191	4.250	4.266	4.328	4.328	4.386	4.418
64	4.000	4.276	4.276	4.316	4.375	4.391	4.453	4.453	4.511	4.543
66	4.125	4.401	4.401	4.441	4.500	4.516	4.578	4.578	4.636	4.668
68	4.250	4.526	4.526	4.566	4.625	4.641	4.703	4.703	4.761	4.793
70	4.375	4.651	4.651	4.691	4.750	4.766	4.828	4.828	4.886	4.918
72	4.500	4.776	4.776	4.816	4.875	4.891	4.953	4.953	5.011	5.043
74	4.625	4.901	4.901	4.941	5.000	5.016	5.078	5.078	5.136	5.168
76	4.750	5.026	5.026	5.066	5.125	5.141	5.203	5.203	5.261	5.291
78	4.875	5.151	5.151	5.191	5.250	5.266	5.328	5.328	5.386	5.418
80	5.000	5.276	5.276	5.316	5.375	5.391	5.453	5.453	5.511	5.543
82	5.125	5.401	5.401	5.441	5.500	5.516	5.578	5.578	5.636	5.668
84	5.250	5.526	5.526	5.566	5.625	5.641	5.703	5.703	5.761	5.793
86	5.375	5.651	5.651	5.691	5.750	5.766	5.828	5.828	5.886	5.918
88	5.500	5.776	5.776	5.816	5.875	5.891	5.953	5.953	6.011	6.043
90	5.625	5.901	5.901	5.941	6.000	6.016	6.078	6.078	6.136	6.168
92	5.750	6.026	6.026	6.066	6.125	6.141	6.203	6.203	6.261	6.291
94	5.875	6.151	6.151	6.191	6.250	6.266	6.328	6.328	6.386	6.418
96	6.000	6.276	6.276	6.316	6.375	6.391	6.453	6.453	6.511	6.543

DASH NO. INDICATES GRIP LENGTH IN .062 INCREMENTS. INTERMEDIATE OR LONGER LENGTHS MAY BE SPECIFIED BY USE OF WHOLE DASH NOS. ONLY.

SHORT BOLTS LISTED ABOVE THE HEAVY LINE SHALL BE THREADED TO .030–.060 OF HEAD TO SHANK INTERSECTION.

REVISION PZCN–130 FEB. 25, 1970

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TITLE: **POZIDRIV® RECESS BOLT, 100° CLOSE TOLERANCE HEAD & SHANK, 160,000 PSI SHORT THREAD**

DRAWN: L. P. & J. C.	DATE: 8–12–66	DRAWING NUMBER **PIC1202 THRU 1210**
CHECKED: L. P.	DATE: 8–19–66	SHEET 3 OF 3

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POZIDRIV® ENGINEERING MANUAL

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PZD–14	POZIDRIV® HAND SCREWDRIVER		03/06/64

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POZIDRIV® SCREW DRIVER AND BIT SPECIFICATION

1.0 SCOPE

1.1 This specification covers the procedures, test values and sampling plans for the inspection of POZIDRIV® Screwdrivers and Power Bits.

2.0 APPLICABLE DRAWING AND SPECIFICATIONS

2.1 PZD – Drawings of the POZIDRIV® Technical Data Manual.

2.2 PZG – Drawings for Screwdriver and Bit Gaging.

2.3 PZFD–6A – POZIDRIV® Master dimensions.

2.4 MIL–STD–105 – Inspection Level II.

3.0 REUIREMENTS

3.1 Materials – The materials used in the manufacture of POZIDRIV® screwdrivers and bits shall be as recommended or be such as to produce tools conforming to requirements specified hereinafter.

3.2 Markings – POZIDRIV® screwdrivers and bits shall be marked as follows:

3.2.1 Bit marking shall consist of the point size, the letters "PZD", "PZ", or "POZIDRIV®", and the manufacturer's symbol.

3.2.2 In the case of hand screwdrivers, the handle and Ferrule may be utilized for the above markings. Manufacturers may, also, include company names, trade names, and trade marks, if they so desire.

3.2.3 In the case of insert bits, if insufficient space is available for marking, the package or shipping container shall include licensee identification, "POZIDRIV® ", and size of point.

3.3 Dimensions – The Dimensions of all POZIDRIV® screwdriver and bit points shall be as specified on applicable drawing in the PZD section of the POZIDRIV® Technical Data Manual.

REISSUED 04/16/64

REISSUED 11/21/63

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TITLE: **POZIDRIV® SCREW DRIVER AND BIT SPECIFICATION**

DRAWN: V. W. MOTTOLA	DATE: 11/21/63	DRAWING NUMBER **PZD-1**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 5

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3.4 Quality – The workmanship shall be of the highest quality throughout. POZIDRIV® screwdrivers and bits shall be free from rust, fins, burrs, sharp or rough edges, corners, or surfaces, and defects which may impair their serviceability or durability.

4.0 DETAIL REQUIREMENTS

4.1 Materials – POZIDRIV® screwdrivers and bits shall be made from the following recommended, or an equivalent, or better, material.

4.1.1 Hand Screw Drivers

4.1.1.1 Light Duty – These drivers are designed for intermittent light usage requiring comparatively low driving torque. Drivers of this type shall be made from AISI 8655 steel, or a suitable equivalent, and heat treated to a hardness of Rc 56–60.

4.1.1.2 Heavy Duty – These drivers are to be used for driving screws under relatively difficult driving conditions requiring high torque and high wear resistance. Drivers of this type shall be made from AISA S2, or equivalent steel, and heat treated to a hardness of Rc 60–64.

4.1.2 Power Bits:

4.1.2.1 Impact Duty – These driver bits are to be used for driving bright hardened screws requiring relatively high torque and normal wear resistance. Driver bits of this type shall be made from AISA S2 steel, or equivalent, and heat treated to a hardness of Rc 58–62.

4.1.2.2 High Wear Duty – These drivers are to be used for driving tapping screws or for applications requiring high wear resistance. Driver bits of this type shall be made from AISI S2 Steel, or equivalent, and heat treated to a hardness of Rc 61–65.

4.1.3 Steel

4.1.3.1 AISI 8655– Type Analysis:

Carbon	–	.50 – .60
Manganese	–	.75 –1.00
Nickel	–	.40 – .70
Chromium	–	.40 – .60
Molybdenum	–	.15 – .25

4.1.3.2 AISI S2 – Type Analysis:

Carbon	–	.50 – .55
Manganese	–	.45 – .55
Silicon	–	.90 –1.10
Molybdenum	–	.45 – .55
Vanadium	–	.15 – .25

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TITLE: **POZIDRIV® SCREW DRIVER AND BIT SPECIFICATION**

DRAWN: V. W. MOTTOLA	DATE: 11–21–63	DRAWING NUMBER **PZD-1**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 2 OF 5

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4.2 Test Requirements and procedures – All POZIDRIV® SCREWDRIVERS AND BITS shall meet the minimum torsional strength specified under each type shown below:

4.2.1 Hand Screwdrivers – Minimom torque strength:

POINT SIZE	LIGHT DUTY TORQUE IN./LBS..	HEAVY DUTY TORQUE IN./LBS.
1	33	35
2	90	100
3	325	350
4	500	550

4.2.2 Power Bits – Minimum torque strength:

POINT SIZE	LIGHT DUTY TORQUE IN./LBS..	HEAVY DUTY TORQUE IN./LBS.
1	35	38
2	90	100
3	325	350
4	700	750

4.2.3 Test Blocks – Screwdriver and bits shall be tested in test blocks having the same form and size of recess as the bit point being tested. POZIDRIV® screwdrivers and bit test blocks shall be in accordance with PZG–11 or PZG–11A. The torque values specified are for test values only and are not intended as recommended or guaranteed driving torques for scews.

4.2.4 Test Procedure – The torsional loads shall be applied either with suitable torque wrenches or by means of a suitable lever with dead weights.

4.2.4.1 The driver of bit must be inserted fully into the test block PZG–11, and the hold–down device adjusted to provide firm and positive engagement, with no axial movement.

4.2.4.2 The torsional load at failure shall be taken as the strength of the driver or bit.

4.2.5 Impact Strength (For information and reference only – not a requirement) – Test sample bits (4.3.5) in accordance with following procedure using test blocks as illustrated on PZG–11. Power impact drivers shall be set to achieve the specified torque when checked on P.I.C. Calibrator for impact drivers.

BIT SIZE	DRIVER	DRIVER SETTING	AIRLINE OPERATING PRESSURE OR TORQUE SETTING	IMPACT TORQUE IN/LBS.	TEST METHOD	MIN. TEST TIME (SEC.) STD. BIT
1	ARO MODEL 106	#1	40 PSI Running	12	Drill Press Fixture	20
2	ARO MODEL 106	#3	60 PSI Running	38	"	15
3	INGERSOLL RAND #5040–T			135	"	15
4	INGERSOLL RAND #5040–T			210	"	120

Test must be contined for minimum time or failure, whichever occurs first. Tested bits which did not fail must not be put back in lot.

REISSUED 10/21/66

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TITLE: **POZIDRIV® SCREW DRIVER AND BIT SPECIFICATION**

DRAWN: V. W. MOTTOLA	DATE: 11–21–63	DRAWING NUMBER **PZD-1**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 3 OF 5

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4.3 Sampling Plans and Inspection Procedure:

4.3.1 Visual and Dimensional Inspection Sampling _ All drivers and bits of the same size, class and type presented at one time shall be considered a lot for purpose of acceptance inspection and test.

4.3.1.1 Count bits – up to 200 pieces, hand count. Over 200 pieces, scale count using small bench scales.

4.3.1.2 Inspect for burrs, proper identification and general appearance. Up to 200 pieces – 100% check. Over 200 pieces, use sampling plan, .65% AQL.

4.3.1.3 Gage using sampling plan, .65% AQL gages per prints PZG9A, PZG9B, PZG9C, or PZG2A. Only one of the four styles is required for gaging.

4.3.1.4 Check hex size and overall length per PZD–9 and check effectiveness of retaining grooves. Up to 200 pieces; check 10 pieces. Over 200 pieces; check 15 pieces.

Retaining groove can be checked by inserting bits in a driver socket and verifying that they enter the socket reasonably well, are retained adequately, and will disengage readily. A detailed dimensional check of the retaining groove is not required.

4.3.2 Point Dimensions – Conformance to the required dimensions for the point shall be determined by the use of the POZIDRIV® bit point gage PZG–9 (A,B,C) or PZG2A.

POZIDRIV bit point gages PZG–9 (A,B,C) are to be set by using the Master Plug Gage, PZG–3, to zero the indicator.

Gaging limits will be as follows:

BIT POINT SIZE	MAXIMUM DIAL READING	MINIMUM DIAL READING
1	+.000 (.000 on dial)	–.006 (.006 on dial)
2	+.002 (.098 on dial)	–.013 (.013 on dial)
3	+.006 (.094 on dial)	–.013 (.013 on dial)
4	+.006 (.094 on dial)	–.014 (.014 on dial)

Any deviation in indicated reading beyond allowable limits shall be caues for rejection.

MIL–STANDARD–105 – .65% A.Q.L. – InspectionLevel II.

LOT SIZE	SAMPLE SIZE	ACC. NO.	REJ. NO
200–300	25	0	1
301–800	75	1	2
801–1300	110	2	3
1301–3200	150	3	4
3201–8000	225	4	5

The PZG2A gage is used by verifying that the "G" point diameter of the bit will extend into the step area provided.

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TITLE: **POZIDRIV® SCREW DRIVER AND BIT SPECIFICATION**

DRAWN: V. W. MOTTOLA	DATE: 11–21–63	DRAWING NUMBER **PZD-1**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 4 OF 5

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4.3.3 Hardness – Specified hardness requirements shall be tested on a Rockwell Tester, using a diamond penetrator and employing a 150 Kilogram major load.

Surface shall be suitably ground for test. Plating, decarburization shall be removed before testing. The hardness of all drivers and bits shall be taken as near to the tip as practicable.

For convenience in inspection, bits may be checked on surface of hex (non–destructive test) and accepted if Rc reading is within ±2 points of specification. If surface reading exceeds ±2 points, sample must be mounted and polished and microhardness tests conducted.

4.3.3.1 Rockwell Hardness – Up to 200 pieces – check 10 pcs.
over 200 pieces – check 15 pcs.

4.3.4 Torsional Strength – Up to 200 pieces – check 10 pcs.
over 200 pieces – check 15 pcs.

4.3.5 Impact Strength (Information and reference only–not a requirement) – Take sample quantity per following table for each lot of bits to be tested. Test each bit in accordance with 4.2.5 procedure using test fixture blocks as illustrated on PZG–11.

LOT SIZE	SAMPLE SIZE
0 – 50 pieces	1
51 – 200 pieces	2
201 – 500 pieces	3
501 – 1000 pieces	4
1001 – 3000 pieces	5
3001 – 10000 pieces	6

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TITLE: **POZIDRIV® SCREW DRIVER AND BIT SPECIFICATION**

DRAWN: V. W. MOTTOLA	DATE: 11–21–63	DRAWING NUMBER **PZD-1**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 5 OF 5

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STYLE A GROOVE

STYLE B GROOVE

5/16 HEX. **1/4 HEX.**

POINT SIZE	+.000 −.005 A	+.000 −.005 B	±.015 C	±.015 D	±.015 E	±.015 F	±.015 G	±.015 H	±.015 J	±.015 K
0								.078	—	—
1	.250	.187	.250	.375			1.000	.125	—	—
2								.187	—	—
	.312	.250	.281	.406	.062	.094	1.250		—	—
3	.250	.187	.250	.375			1.000	.281	—	—
	.312	.250	.281	.406			1.250		—	—
4								.344	—	—
	.437	.344	*	.250	.047	.109			—	—
5	.625	.531		—	—	—	2.250	.438	.344	.172

* NO BEVEL ON 7/16 & 5/8 HEX. SIZE.

REFER TO PZD–1 FOR MATERIAL, HEAT TREAT AND MARKING.

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POZIDRIV® INSERT DRIVER BIT

DRAWN	DATE	DRAWING NUMBER
K. NIERMEYER	10–26–67	**PZD-9**
CONFIRMED: L. DOUGAN	DATE 11–7–11	SHEET 1 OF 1

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POINT SIZE	±.005 A	± 1/4 B	± 3/8 C
1	3/16	3 1/8	6 3/8
2	1/4	4	8 7/8
3	5/16	6	11 1/4
4	3/8	8 1/8	14 5/8

NOTE: (3) SUFFIX "W" INDICATES WOOD HANDLE. "P" IS WITH FEDERAL SPECIFICATION GGG-S-121c. AND MARKINGS.

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TITLE:

POZIDRIV® HAND SCREW DRIVER

DRAWN: L.A. PROULX	DATE: 3-6-64	DRAWING NUMBER **PZD-14**
CONFIRMED: L. DOUGAN	DATE: 11-7-11	SHEET 1 OF 1

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06/30/71
01/04/83
06/25/96

POZIDRIV® ENGINEERING MANUAL

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RECOMMENDED INSPECTION PROCEDURE

FOR

POZIDRIV® CROSS RECESSED HEAD SCREWS

1. GENERAL

1.1 This standard was prepared by the POZIDRIV® Recess Engineering Standards Committee to meet the growing need for the use of standard inspection proedures by both manufacturers and consumers of POZIDRIV® Cross Recessed Head Screws.

2. SCOPE

2.1 This standard establishes sampling plans and procedures for the inspection of POZIDRIV® Screws.

2.2 Inspection practice in accordance with procedures, sampling plans and specified gages set forth herein will guarantee product uniformity for dimension, appearance and function.

3. CLASSIFICATION OF DEFECTS

3.1 This standard covers only those defects classified as follows:

3.1.1 Incomplete and/or malformed recesses
3.1.2 Recess Wobble Gaging
3.1.3 Penetration Gaging
3.1.4 Head discontinuities
3.1.5 Recess to shank eccentricity

3.2 The inspection characteristics and applicable AQL's specified herein are not cumulative and are not to be grouped. Each inspection characteristic shall be inspected separately to its specidfied AQL.

4. SAMPLING PLANS

4.1 A sampling plan for each AQL value specified may be selected from Table I.

4.2 Sampling plans specified in Table I are for single sampling. Consumer may use double or multiple plans of proper AQL in accordance with MIL-STD-105 and subsequent revisions thereof or other comparable sampling plans.

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TITLE: **QUALITY GUIDE FOR COMMERCIAL POZIDRIV® SCREW**

DRAWN: L. WHITE	DATE: 11-16-66	DRAWING NUMBER PZG-0
CONFIRMED: L. DOUGAN	DATE: 11-7-11	SHEET 1 OF 5

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4. SAMPLING PLANS (cont'd.)

4.3 Determine total quantity of lot. A lot is defined as a collection of units of one size and style received at one time. For example, 7 cartons or boxes of one screw size and style received at one time would be considered as one lot. If several different sizes, lengths or styles were received at the same time, each would be considered as a separate lot.

4.4 Using the lot quantity, determine the proper sample size.

TABLE I

Lot Size	Sample Size	1.0% AQL #Acc.	1.0% AQL #Rej.	2.5% AQL #Acc.	2.5% AQL #Rej.	6.5% AQL #Acc.	6.5% AQL #Rej.
0–500	50	1	2	3	4	6	7
501–800	75	2	3	4	5	9	10
801–1,300	110	3	4	6	7	12	13
1,301–3,200	150	4	5	8	9	17	18
3,201–8,00	225	5	6	11	12	24	25
8,001–22,000	300	7	8	14	15	32	33
22,001–110,000	450	10	11	20	21	43	44
110,001–550,000	750	15	16	31	32	68	69
550,001– & over	1,500	25	26	56	57	124	125

4.5 Take samples from the lot in approximate proportion to the number of boxes or cartons in the lot. The samples should be taken in a random manner from the top, middle and bottom of each box to avoid any possibility of stratification.

4.6 INCOMPLETE AND/OR MALFORMED RECESSES: Examine each piece in the sample lot for incomplete or malformed recesses in accordance with 1.0% AQL.

Accept the lot for further inspection, if fewer than the allowable number of defectives are found.

Reject the lot if more than the allowable number of defectives are found.

4.7 RECESS WOBBLE GAGING: Using the same sample lot, inspect each piece for "wobble" of master plug in recess in accordance with 1.0% AQL. The POZIDRIV® wobble gage is shown on print PZG–17 of the POZIDRIV® Technical Manual. Screws coated to thicknesses greater than .0003 inches shall be stripped of such coating before inspection.

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TITLE: **QUALITY GUIDE FOR COMMERCIAL POZIDRIV® SCREW**

DRAWN: L. WHITE	DATE: 11–16–66	DRAWING NUMBER **PZG-0**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 2 OF 5

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4.7 RECESS WOBBLE GAGING (cont'd)

TABLE II

The limits of angular wobble for various recess sizes are as follows:

Recess size	Allowable Wobble Angle
1	12
2	10
3	8
4	8

Any individual piece having a reading beyond the tabulated limits shall be considered a defective. Accept the lot for inspection if fewer than the allowable number of defectives are found.

Reject the lot if more than the allowable number of defectives are found.

4.8 PENETRATION GAGING: Using the same sample lot, inspect each piece for maximum and minimum penetration gaging depths in accordance with 1.0% AQL. The use of the POZIDRIV® penetration gage is shown on PZG–10. For penetration specfications covering all types and sizes of standard products refer to the appropriate POZIDRIV® Head Standards (PZHS) sheets. Plated or coated screws which fail to met the penetration gaging requirements must be stripped of finish and gaged for acceptance or rejection in the plain condition.

Any individual piece having a penetration reading above the maximum specification value or below the minimum specfication value shall be considered a defective.

Accept the lot for further inspection if fewer than the allowable number of defectives are found for maximum or minimum penetration considered separately. Do not combine maximum penetration defectives with minimum penetration defectives since the AQL's apply separately to these classifications.

Reject the lot if more than the allowable number of defectives are found for maximum and minimum penetration considered separately.

4.9 HEAD DISCONTINUITIES: Using the same sample lot, examine each piece for head discontinuities in accordance with Chart 1, page #5 of this document at 2.5% AQL. Any individual piece exceeding these limits shall be considered a defective.

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TITLE: **QUALITY GUIDE FOR COMMERCIAL POZIDRIV® SCREW**

DRAWN: L. WHITE	DATE: 11–4–68	DRAWING NUMBER **PZG-0**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 3 OF 5

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4.9 HEAD DISCONTINUTIES (cont'd.)

Accept the lot for further inspection if fewer than the allowable number of defectives are found.

Reject the lot if more than the allowable number of defectives are found.

4.9 RECESS TO SHANK ECCENTRICITY:

Using the same sample lot, inspect each piece for eccentricity of recess shank in accordance with 6.5% AQL. Generally, this inspection will be most readily accomplished by a simple visual examination.

The recesses in screw heads shall not be eccentric with screw bodies by more than 6% of the nominal (basic) body diameter or .015", whichever is the greater. The following tabulation lists the amount of recess eccentricity permitted for popular screw sizes.

TABLE III

Screw Size	Nominal Body Diameter	Allowable Eccentricity
0	.060	.015
1	.073	.015
2	.086	.015
3	.089	.015
4	.112	.015
5	.125	.015
6	.138	.015
7	.151	.015
8	.164	.015
9	.177	.015
10	.190	.015
12	.216	.015
14	.242	.015
1/4	.250	.015
16	.268	.016
18	.294	.018
5/16	.3125	.019
20	.320	.019
24	.372	.022
3/8	.375	.023
7/16	.4375	.026
1/2	.500	.030

Any individual piece exceeding these limits shall be considered a defective. Accept the lot if fewer than the allowable number of defectives are found. Reject the lot if more than the allowable number of defectives are found.

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CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 4 OF 5

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NOT ACCEPTABLE

(1)

LARGE OPEN IMPERFECTIONS EXTENDING OVER 1/2 WAY TO RECESS

(2)

OPEN ANGULAR IMPERFECTIONS ON EDGE OF HEAD

(3)

SLIVERS OR LOOSE FLAKES ON TOP OF HEAD

ACCEPTABLE

(4)

MULTIPLE IMPERFECTIONS NOT EXTENDING 1/2 WAY TO RECESS AND NOT AFFECTING USEABILITY

(5)

SLIGHT HAIR LINES

(6)

SLIGHT RECESS FLOW LINES

(7)

SLIGHT TOOL MARKS
SLIGHT PIN MARKS

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TITLE:

QUALITY GUIDE FOR COMMERCIAL POZIDRIV® SCREW

DRAWN: L. WHITE	DATE: 5–26–65	DRAWING NUMBER **PZG-0**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 5 OF 5

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POINT SIZE	+.0000 −.0010 B	REF. D	+.000 −.001 G	+.000 −.001 I	+.000 −.003 J	+.000 −.005 K
1	.0477	.135	.065	.070	——	——
2	.0719	.217	.111	.110	.070	.620
3	.1078	.312	.171	.140		
4	.1587	.413	.219	.193		
5	.2512	.625	.337	.289		

NOTE: GAGE TO BE PRESSED WITH MASTER PUNCH PIC525.
HEAT TREAT TO Rc 63 MIN.
◉ THESE DIMENSIONS TO BE CONCENTRIC WITHIN .002 T.I.R.

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A PZCN132
JUNE 06, 1970

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TITLE:

POZIDRIV® GAGE FOR BIT POINT GAGE PZG-9B & -9C

DRAWN: A. P. C.	DATE: 4–9–70	DRAWING NUMBER **PZG-2**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

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POINT SIZE	A ±.0002	B " +.0005 −.0000	C ±.001	D ±.002	E ±.0020	F +.0002 −.0000
0	.0175	.0275	.005	.093	.0582	.0175
1	.0270	.0440	.010	.141	.0872	.0275
2	.0470	.0674	.010	.231	.1374	.0390
3	.0770	.1028	.010	.357	.2036	.0540
4	.1010	.1533	.010	.507	.3059	.0820
5	.1570	.2403	.010	.669	.3560	.0890

NOTES:

1. This gage is not intended for final acceptance of bits, Wing thickness F and wing angle must be checked separately.
2. B"= B+ (G−B) tan 18 tan H + C tan H
   Where: G and B are min dimensions of bit, H is milling angle (7° or 5° 45'), and C is gage step.
3. F to be measured at top of step only – at location of A dimension.
4. Gage to be pressed with master punch per PIC 525 with a tip extension.
5. Heat treat to Rc 63 min.
6. Dimensions as listed are provided for manufacturing guidance only.

REVISION 1/ OCT 3, 89 2/ECO 113 11-2-93

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TITLE: **POZIDRIV® RING GAGE FOR BIT POINTS**

DRAWN: J. GRADY	DATE: 9–15–88	DRAWING NUMBER **PZG-2A**
CHECKED: J. GRADY	DATE: 10–21–88	SHEET 1 OF 1

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POINT SIZE	REF. C	±.010 F	±.031 G	+.000 −.001 H	±.031 I
0	.078	.125	.875	.181	1.625
1	.125	.188	.875	.181	1.750
2	.187	.250	.875	.181	1.750
3	.281	.313	1.000	.240	2.000
4	.344	.375	1.000	.240	2.000
5	.438	.750	1.000	.240	2.000

NOTES:

1.) Material to be water–hardened drill rod heat treated to Rockwell C–63 min.
2.) Refer to PZD–1 for markings.
3.) Refer to PZFD–6A for point detail and dimensions not shown.

PZCN–193 JULY 04, 1983

PZCN–190 JUNE 13, 1979

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TITLE:

POZIDRIV®
MASTER PLUG GAGE

DRAWN: S. GUARINO	DATE: 6–13–79	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11–7–11	**PZG-3** SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

OBSOLETE - INCLUDED FOR REFERNCE ONLY

POZIDRIV® RECESS PRESSED WITH HOBBING MASTER PUNCH, CONFIG-URATION PER PZFD-6A.

"TRU-ARC" RETAINING RING SIZE X75, SERIES 3001

POINT SIZE	A	B	C	D	G	I	DRIVER PENETRATION
1	.060 .055	$1\frac{9}{16}$	.053	.135	.067	.070	+.000 (.000 ON DIAL) −.006 (.006 ON DIAL)
2	.100 .095	$1\frac{19}{32}$	.096	.217	.108	.110	+.002 (..098 ON DIAL) −.013 (.013 ON DIAL)
3	.130 .125	$1\frac{5}{8}$	.156	.312	.170	.140	+.006 (.094 ON DIAL) −.013 (.013 ON DIAL)
4	.173 .168	$1\frac{43}{64}$	.204	.413	.223	.193	

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TITLE:

POZIDRIV®

DRIVER PENETRATION GAGE

DRAWN: L.A. PROULX	DATE: 03/13/1964	DRAWING NUMBER **PZG-9A**
CONFIRMED: L. DOUGAN	DATE: 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
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"TRU–ARC" RETAINING RING SIZE N5001–75

POZIDRIV® RECESS PRESSED WITH HOBBING MASTER PUNCH, CONFIGURATION PER PIC 525 DWG.

POINT SIZE	* B	+.000 −.001 C	REF. D	MAX. G	I	+.000 −.003 J	+.000 −.010 K	+.000 −.005 L	DRIVER PENETRATION
1	.0467	.055	.135	.065	.070	——	——	.718	+.000 (.000 on DIAL) −.006 (.006 on DIAL)
2	.0709	.096	.217	.111	.110	.070	.620	.678	+.002 (.098 on DIAL) −.013 (.013 on DIAL)
3	.1068	.156	.312	.171	.140			.648	+.006 (.094 on DIAL) −.013 (.013 on DIAL)
4	.1577	.204	.413	.219	.193			.595	
5		.316	.625	.337	.289			.500	

* ALTHOUGH NOT SHOWN ON THIS DRAWING, THIS DIMENSION IS MEASURED IN THE SAME PLANE AS THE "G" DIMENSION. REFER TO PZFD–6A FOR IT'S GEOMETRIC POSITION.

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TITLE:

POZIDRIV®
DRIVER PENETRATION GAGE

DRAWN: A.P.C.	DATE: 02/24/1970	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11–7–11	**PZG-9B** SHEET 1 OF 1

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SET GAGE TO ZERO INDICATOR POSITION WITH MASTER PLUG GAGE PZG-3 AS SHOWN

POZIDRIV® RECESS PRESSED WITH HOBBING MASTER PUNCH, CONFIGURATION PER PIC 525 DWG.

POINT SIZE	+.0000 −.0010 B*	+.000 −.001 C	REF. D	+.000 −.001 G	+.000 −.001 I	+.000 −.003 J	+.000 −.005 K	DRIVER PENETRATION
1	.0477	.055	.135	.065	.070	——	——	+.000 (.000 on DIAL) −.006 (.006 on DIAL)
2	.0719	.096	.217	.111	.110	.070	.620	+.002 (.098 on DIAL) −.013 (.013 on DIAL)
3	.1078	.156	.312	.171	.140			+.006 (.094 on DIAL) −.013 (.013 on DIAL)
4	.1587	.204	.413	.219	.193			
5	——	.316	.625	.337	.289			

* ALTHOUGH NOT SHOWN ON THIS DRAWING, THIS DIMENSION IS MEASURED IN THE SAME PLANE AS THE "G" DIMENSION. REFER TO PZFD-6A FOR IT'S GEOMETRIC POSITION.

PZCN-132 JUNE 11, 1970

PZCN-131 APRIL 29, 1970

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TITLE:

POZIDRIV®
DRIVER PENETRATION GAGE

DRAWN: A.P.C.	DATE: 03/25/70	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11-7-11	**PZG-9C** SHEET 1 OF 1

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GAGE ASSEMBLY

GAGE BODY

SECTION A–A

GAGE PIN

STANDARD DIAL GAGE WITH NUMERALS READING COUNTER–CLOCKWISE IN THOUSANDTHS.

GAGE BUSHING FOR NO. 5 SIZE

POINT SIZE	±.0002 B	±.003 C	±.002 D	±.0002 E	±.005 F	±.005 G	±.005 H	±.005 J	K	±.005 L	±.005 M	FLAT N
0	.0460	.015	.008	.0450	.094	.656	.781	1.688	.377	1.126	.562	.015 .010
1	.0880	.020	.012	.0870	.156	.688	.812					.020 .015
2	.1420	.031	.018	.1410	.219	.750	.875					
3	.2100	.037	.022	.2090	.250	.781	.906					
4	.3130	.062	.031	.3120	.359	.844	.969					
5	.5010	.094	.041	.5000	.531	1.031	1.156	1.896	.550	1.134	.750	.025 .020

PZCN–122	3–21–69
PZCN–119	2–12–69
PZCN–88	1–23–67
PZCN–87	12–20–66
PZCN–80	6–16–66
PZCN–54	4–8–65

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TITLE:

POZIDRIV ®
SCREW PENETRATION GAGE

DRAWN:	DATE:	DRAWING NUMBER
L.A. PROULX	02/27/1984	**PZG-10**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

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POINT SIZE	+.006 −.000 A	REF. B	+0 − 1/32 C	DRILL SIZE
0	.090	.058	5/8	.0225
1	.142	.092	17/32	.035
2	.233	.143	1/2	.063
3	.386	.236	3/8	.094
4	.486	.289	5/16	.141

MATERIAL AND HEAT TREAT

MOTUNG OR EQUIV. −Rc 61−63

PZCN−81 9−7−66 | ECO−42 11−23−83

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TITLE:

POZIDRIV®

TORQUE TEST BLOCKS

DRAWN: L.A. PROULX	DATE: 03/06/1964	DRAWING NUMBER **PZG-11**
CONFIRMED: L. DOUGAN	DATE: 11−7−11	SHEET 1 OF 1

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GAGE ASSEMBLY

SAME GAGE POINT AS USED IN PZG-10 GAGE ASSEMBLY.

STANDARD DIAL GAGE WITH NUMERALS READING COUNTER-CLOCKWISE IN THOUSANDTHS.

GAGE BODY

SECTION A-A

POINT SIZE	±.0002 B	±.003 C	±.005 J	±.001 K	±.005 L	+.000 −.005 M
0	.0460	.015				
1	.0880	.030				.145
2	.1420	.060	1.688	.377	1.126	.190
3	.2100	.090				.260
4	.3130	.120				.420

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TITLE:

POIZDRIV® SCREW PENETRATION GAGE FOR INDENTED HEX. HEAD SCREWS

DRAWN: A.P.C.	DATE: 06/11/1970	DRAWING NUMBER **PZG-12**
CONFIRMED: L. DOUGAN	DATE: 11-7-11	SHEET 1 OF 1

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PHONE: 774-396-6190 FAX: 508-966-2326

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TOP PLATE

ALUM. BASE

BACK PLATE

ALUM. THUMB SCREW

HANDLE ADAPTOR

POINT SIZE	H +.000 −.001	REF. I
0,1,2	.181	.185
3,4,5	.240	.244

REVISION	
	6–29–79
	4–2–71
	2–2–70
	12–17–69

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TITLE:

WOBBLE GAGE MODEL 'D'

DRAWN: V. W. MOTTOLA	DATE: 6–30–60	DRAWING NUMBER PZG-17
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 1 OF 2

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
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BILL OF MATERIALS

DASH NO.	REQ'D	DESCRIPTION
2	1	BACK PLATE
3	1	TOP PLATE
4	1	BASE
5	1	THUMB SCREW
6	1	3/8 CAPACITY CHUCK –.500 SHANK
7	2	10–32 x .500 POZIDRIV FLAT HD. SCR.
8	2	6–32 x .500 POZIDRIV FLAT HD. SCR.

NOTES:

(1) ALL PARTS ARE BLACK ANODIZED ALUMINUM
(2) ALL SHARP EDGES TO BE BROKEN
(3) MARK DEGREE LINES AFTER ANDODIZING.

PZG-17 SHEET 2 OF 2

REVISION

POZIDRIV® ENGINEERING MANUAL

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POZIDRIV® ENGINEERING MANUAL

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D ±.0005	K +.001 −.000	L +.000 −.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' −07' E	F	+.002 −.000 G	+15' −00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

WOOD SCREWS

SCREW SIZE	PUNCH NO.	+.006 −.000 A	±.0005 D	REF J	MIN. FACE DIA Y	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00−4	.061	.4375	.037	.119	.037	.032
1	3PZ00−5	.069	.4375	.045	.146	.045	.040
2	3PZ10−1	.094	.4375	.057	.199	.053	.048
3	3PZ10−2	.099	.4375	.062	.199	.058	.053
4	3PZ10−3	.120	.4375	.083	.252	.079	.074
5	3PZ20−1	.146	.4375	.080	.305	.071	.065
6	3PZ20−2	.166	.4375	.100	.332	.091	.085
7	3PZ20−3	.181	.5625	.115	.385	.107	.101
8	3PZ20−4	.196	.5625	.130	.385	.122	.116
9	3PZ20−5	.206	.5625	.140	.358	.132	.126
10	3PZ30−1	.250	.5625	.140	.385	.125	.119
12	3PZ30−3	.275	.8750	.165	.507	.151	.145
14	3PZ30−4	.295	.8750	.185	.544	.171	.165
16	3PZ30−5	.320	1.0000	.210	.544	.196	.190
18	3PZ40−1	.370	1.0000	.225	.709	.206	.200
20	3PZ40−2	.385	1.2500	.240	.812	.222	.216
24	3PZ40−3	.416	1.2500	.271	.875	.253	.247

NOTES:

REFER TO PZFD−6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG−0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE−HALF THE TABULATED VALUES.

REVISION	
PZCN−89	2−3−67
PZCN−114	5−23−68
PZCN−133	6−30−70
ECO−153	7−25−13

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TITLE:

POZIDRIV®
FLAT HEAD PUNCHES

DRAWN: R. H. SOMERS	DATE: 1−3−64	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11−7−11	**PPZ-1** SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774−396−6190 FAX: 508−966−2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 −.000	L +.000 −.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' −07' E	F	+.002 −.000 G	+15' −00' H	P	R
0	.0300 .0285	46° 00′	.0190 .0180	.032	7° 00′	.012 .008	.004 .003
1	.0500 .0480	46° 00′	.0290 .0280	.050	7° 00′	.012 .006	.005 .003
2	.0720 .0700	46° 00′	.0405 .0395	.090	5° 45′	.015 .009	.006 .003
3	.1070 .1050	56° 15′	.0560 .0550	.150	5° 45′	.020 .014	.010 .005
4	.1560 .1540	56° 15′	.0850 .0840	.198	7° 00′	.025 .019	.015 .008
5	.2460 .2440	56° 15′	.0960 .0950	.311	7° 00′	.030 .024	.035 .025

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	+.006 −.000 A	±.0005 D	REF J	MIN. FACE DIA Y	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00−4	.061	.4375	.037	.119	.037	.032
1	3PZ00−5	.069	.4375	.045	.146	.045	.040
2	3PZ10−1	.094	.4375	.057	.199	.053	.048
3	3PZ10−2	.099	.4375	.062	.199	.058	.053
4	3PZ10−3	.120	.4375	.083	.252	.079	.074
5	3PZ20−1	.146	.4375	.080	.305	.071	.065
6	3PZ20−2	.166	.4375	.100	.332	.091	.085
7	3PZ20−6	.174	.5625	.108	.385	.099	.093
8	3PZ20−3	.181	.5625	.115	.385	.107	.101
10	3PZ20−4	.196	.5625	.130	.385	.122	.116
12	3PZ30−2	.260	.8750	.150	.544	.136	.130
1/4	3PZ30−3	.275	.8750	.165	.507	.151	.145
5/16	3PZ40−4	.357	1.0000	.210	.762	.193	.187
3/8	3PZ40−2	.385	1.2500	.240	.812	.222	.216
7/16	3PZ40−5	.401	1.2500	.255	.875	.238	.232
1/2	3PZ40−3	.416	1.2500	.271	.875	.253	.247
9/16	3PZ40−141	.439	1.5000	.294	1.000	.276	.270
5/8	3PZ50−3	.564	2.0000	.336	1.625	.307	.300
3/4	3PZ50−4	.628	2.0000	.400	1.500	.372	.365

NOTES:

REFER TO PZFD−6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG−0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE−HALF THE TABULATED VALUES.

REVISION	PZCN−68 11−26−65	PZCN−89 2−3−67	PZCN−114 5−23−68	ECO−153 7−25−13

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TITLE:

POZIDRIV ®
FLAT HEAD PUNCHES

DRAWN R.H. SOMERS	DATE 1−3−64	DRAWING NUMBER **PPZ-1A**
CONFIRMED: L. DOUGAN	DATE 11−7−11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774−396−6190 FAX: 508−966−2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 -.000	L +.000 -.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' -07' E	F	+.002 -.000 G	+15' -00' H	P	R
0	.0300 .0285	46° 00′	.0190 .0180	.032	7° 00′	.012 .008	.004 .003
1	.0500 .0480	46° 00′	.0290 .0280	.050	7° 00′	.012 .006	.005 .003
2	.0720 .0700	46° 00′	.0405 .0395	.090	5° 45′	.015 .009	.006 .003
3	.1070 .1050	56° 15′	.0560 .0550	.150	5° 45′	.020 .014	.010 .005
4	.1560 .1540	56° 15′	.0850 .0840	.198	7° 00′	.025 .019	.015 .008
5	.2460 .2440	56° 15′	.0960 .0950	.311	7° 00′	.030 .024	.035 .025

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

TYPE "A" TAPPING SCREWS

SCREW SIZE	PUNCH NO.	+.006 -.000 A	±.0005 D	REF J	MIN. FACE DIA Y	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00-4	.061	.4375	.037	.119	.037	.032
1	3PZ00-5	.069	.4375	.045	.146	.045	.040
2	3PZ10-1	.094	.4375	.057	.199	.053	.048
3	3PZ10-2	.099	.4375	.062	.199	.058	.053
4	3PZ10-3	.120	.4375	.083	.252	.079	.074
5	3PZ20-1	.146	.4375	.080	.305	.071	.065
6	3PZ20-2	.166	.4375	.100	.332	.091	.085
7	3PZ20-6	.174	.5625	.106	.385	.099	.093
8	3PZ20-3	.181	.5625	.115	.385	.107	.101
10	3PZ20-4	.196	.5625	.130	.385	.122	.116
12	3PZ30-2	.260	.8750	.150	.544	.136	.130
14	3PZ30-3	.275	.8750	,165	.507	.151	.145
16	3PZ30-4	.295	.8750	.185	.544	.171	.165
18	3PZ40-4	.357	1.0000	.210	.762	.193	.187
20	3PZ40-1	.370	1.0000	.225	.709	.206	.200
24	3PZ40-2	.385	1.2500	.240	.812	.222	.216

REVISION	PZCN-89 2-6-67	PZCN-114 5-23-68	PZCN-133 6-30-70	ECO-153 7-25-13

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TITLE:

POZIDRIV® FLAT HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
R.H. SOMERS	1-3-64	**PPZ-1B**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

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D ±.0005	K +.001 −.000	L +.000 −.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' −07' E	F	+.002 −.000 G	+15' −00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	+.006 −.000 A	±.0005 D	REF J	MIN. FACE DIA Y	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00−4	.061	.4375	.037	.119	.037	.032
1	3PZ00−5	.069	.4375	.045	.146	.045	.040
2	3PZ10−80	.087	.4375	.050	.172	.046	.041
3	3PZ10−1	.094	.4375	.057	.199	.053	.048
4	3PZ10−54	.109	.4375	.072	.225	.068	.063
5	3PZ10−3	.120	.4375	.083	.252	.079	.074
6	3PZ20−285	.138	.4375	.072	.279	.063	.057
7	3PZ20−1	.146	.4375	.080	.305	.071	.065
8	3PZ20−2	.166	.4375	.100	.332	.091	.085
10	3PZ20−3	.181	.5625	.115	.385	.107	.101
12	3PZ30−166	.225	.8750	.115	.438	.100	.094
1/4	3PZ30−85	.240	.8750	.130	.507	.115	.109
5/16	3PZ40−260/79	.309	.8750 / 1.0000	.162	.750	.145	.139
3/8	3PZ40−4	.357	1.0000	.210	.762	.193	.187
7/16	3PZ40−2	.385	1.2500	.240	.812	.222	.216
1/2	3PZ40−5	.401	1.2500	.255	.875	.238	.232
9/16	3PZ40−3	.416	1.2500	.271	.875	.253	.247
5/8	3PZ50−3	.564	2.0000	.336	1.625	.307	.300
3/4	3PZ50−4	.628	2.0000	.400	1.500	.372	.365

NOTES:

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REVISION	PZCN−89 2−8−67	PZCN−114 5−23−68	PZCN−133 6−30−70	ECO−153 7−25−13

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TITLE:

POZIDRIV® UNDERCUT FLAT HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
V.W. MOTTOLA	1−6−64	**PPZ-1C**
CONFIRMED: L. DOUGAN	DATE 11−7−11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774−396−6190 FAX: 508−966−2326

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D ±.0005	K +.001 −.000	L +.000 −.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' −07' E	F	+.002 −.000 G	+15' −00' H	P	R
0	.0300 .0285	46° 00′	.0190 .0180	.032	7° 00′	.012 .008	.004 .003
1	.0500 .0480	46° 00′	.0290 .0280	.050	7° 00′	.012 .006	.005 .003
2	.0720 .0700	46° 00′	.0405 .0395	.090	5° 45′	.015 .009	.006 .003
3	.1070 .1050	56° 15′	.0560 .0550	.150	5° 45′	.020 .014	.010 .005
4	.1560 .1540	56° 15′	.0850 .0840	.198	7° 00′	.025 .019	.015 .008
5	.2460 .2440	56° 15′	.0960 .0950	.311	7° 00′	.030 .024	.035 .025

NOTE:

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TYPE "A" TAPPING SCREWS

SCREW SIZE	PUNCH NO.	+.006 −.000 A	±.0005 D	REF J	MIN. FACE DIA Y	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00-4	.061	.4375	.037	.119	.037	.032
1	3PZ00-5	.069	.4375	.045	.146	.045	.040
2	3PZ10-80	.087	.4375	.050	.172	.046	.041
3	3PZ10-1	.094	.4375	.057	.199	.053	.048
4	3PZ10-54	.109	.4375	.072	.225	.068	.063
5	3PZ10-3	.120	.4375	.083	.252	.079	.074
6	3PZ20-285	.138	.4375	.072	.279	.063	.057
7	3PZ20-1	.146	.4375	.080	.305	.071	.065
8	3PZ20-2	.166	.4375	.100	.332	.091	.085
10	3PZ20-3	.181	.5625	.115	.385	.107	.101
12	3PZ30-166	.225	.8750	.115	.438	.100	.094
14	3PZ30-85	.240	.8750	.130	.507	.115	.109
16	3PZ30-2	.260	.8750	.150	.544	.136	.130
18	3PZ40-260/79	.309	.8750 / 1.0000	.162	.750	.145	.139
20	3PZ40-64	.327	1.0000	.180	.650	.163	.157
24	3PZ40-4	.357	1.0000	.210	.762	.193	.187

REVISION	PZCN-89 2-8-67	PZCN-114 5-23-68	PZCN-133 6-30-70	ECO-153 7-25-13

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POZIDRIV ® UNDERCUT FLAT HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
V.W. MOTTOLA	1-7-64	**PPZ-1D**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

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D ±.0005	K +.001 –.000	L +.000 –.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00′ –07′ E	F	+.002 –.000 G	+15′ –00′ H	P	R
0	.0300 .0285	46° 00′	.0190 .0180	.032	7° 00′	.012 .008	.004 .003
1	.0500 .0480	46° 00′	.0290 .0280	.050	7° 00′	.012 .006	.005 .003
2	.0720 .0700	46° 00′	.0405 .0395	.090	5° 45′	.015 .009	.006 .003
3	.1070 .1050	56° 15′	.0560 .0550	.150	5° 45′	.020 .014	.010 .005
4	.1560 .1540	56° 15′	.0850 .0840	.198	7° 00′	.025 .019	.015 .008
5	.2460 .2440	56° 15′	.0960 .0950	.311	7° 00′	.030 .024	.035 .025

NOTES:

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MACHINE & TAPPING SCREWS

SCREW SIZE AND HEAD SIZE	PUNCH NO.	+.006 –.000 A	±.0005 D	REF J	MIN. FACE DIA Y	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
4 WITH 3 HEAD	3PZ10–2	.099	.4375	.062	.199	.058	.053
5 WITH 4 HEAD	3PZ10–3	.120	.4375	.083	.252	.079	.074
6 WITH 4 HEAD	3PZ10–3	.120	.4375	.083	.252	.079	.074
6 WITH 5 HEAD	3PZ20–1	.146	.4375	.080	.305	.071	.065
8 WITH 5 HEAD	3PZ20–134	.156	.4375	.090	.305	.081	.075
8 WITH 6 HEAD	3PZ20–6	.174	.5625	.108	.385	.099	.093
10 WITH 8 HEAD	3PZ20–3	.181	.5625	.115	.385	.107	.101
12 WITH 8 HEAD	3PZ20–254	.190	.5625	.125	.385	.117	.111
12 WITH 10 HEAD	3PZ20–4	.196	.5625	.130	.385	.122	.116
1/4 14 WITH 10 HEAD	3PZ20–4	.196	.5625	.130	.385	.122	.116
1/4 14 WITH 12 HEAD	3PZ30–2	.260	.8750	.150	.544	.136	.130
5/16 WITH 12 HEAD	3PZ30–2	.260	.8750	.150	.544	.136	.130
5/16 WITH 1/4 HEAD	3PZ30–3	.275	.8750	.165	.507	.151	.145
3/8 WITH 5/16 HEAD	3PZ40–4	.357	1.0000	.210	.762	.193	.187

REVISION	
PZCN–114	5–23–68
PZCN–133	6–30–70
ECO–153	7–25–13

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TITLE:

POZIDRIV® FLAT TRIM HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
R.H. SOMERS	4–8–65	**PPZ-1E**
CONFIRMED: L. DOUGAN	DATE 11–7–11	SHEET 1 OF 1

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.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
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1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' –07' E	F	+.002 –.000 G	+15' –00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

NOTES:

REFER TO PZFD–6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG–0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE–HALF THE TABULATED VALUES.

100° FLUSH HEAD MACHINE SCREWS

SCREW SIZE	PUNCH NO.	+.006 –.000 A	±.0005 D	REF J	MIN. FACE DIA Y	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00–19	.053	.4375	.029	.119	.029	.024
1	3PZ00–4	.061	.4375	.037	.119	.037	.032
2	3PZ10–80	.087	.4375	.050	.172	.046	.041
3	3PZ10–1	.094	.4375	.057	.199	.053	.046
4	3PZ10–54	.109	.4375	.072	.225	.068	.063
6	3PZ20–1	.146	.4375	.080	.305	.071	.065
8	3PZ20–135	.161	.5625	.095	.375	.086	.080
10	3PZ20–136	.176	.5625	.110	.438	.101	.095
1/4	3PZ30–93	.239	.8750	.129	.594	.115	.109
5/16	3PZ40– 260/79	.309	.8750 / 1.0000	.162	.750	.145	.139
3/8	3PZ40–106	.334	1.0000	.187	.844	.170	.164

REVISION	
PZCN–89	2–2–67
PZCN–114	5–23–66
ECO #150	9–13–12
ECO #153	7–25–13

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TITLE:

POZIDRIV®
100° FLUSH HEAD MACHINE SCREW PUNCHES

DRAWN	DATE	DRAWING NUMBER
R.H. SOMERS	4–9–65	**PPZ-1F**
CONFIRMED: L. DOUGAN	DATE 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 –.000	L +.000 –.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' –07' E	F	+.002 –.000 G	+15' –00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

NOTES:

REFER TO PZFD–6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG–0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE–HALF THE TABULATED VALUES.

WOOD SCREWS

SCREW SIZE	PUNCH NO.	+.006 –.000 A	±.0005 D	REF J	+.002 –.000 M	+.005 –.000 N	+.005 –.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00–14	.059	.4375	.040	.028	.131	.091	.033	.028
1	3PZ00–15	.066	.4375	.046	.034	.160	.111	.040	.035
2	3PZ10–13	.096	.4375	.068	.040	.190	.132	.053	.048
3	3PZ10–14	.104	.4375	.077	.045	.215	.150	.062	.057
4	3PZ10–15	.114	.4375	.087	.049	.241	.173	.072	.067
5	3PZ20–20	.146	.4375	.095	.053	.264	.191	.068	.062
6	3PZ20–21	.154	.4375	.103	.055	.280	.207	.076	.070
7	3PZ20–22	.162	.5625	.111	.064	.317	.228	.085	.079
8	3PZ20–23	.169	.5625	.118	.072	.346	.244	.092	.086
9	3PZ20–24	.177	.5625	.126	.082	.382	.263	.100	.094
10	3PZ20–25	.185	.5625	.135	.087	.409	.284	.108	.102
12	3PZ30–21	.246	.8750	.160	.096	.459	.323	.117	.111
14	3PZ30–226	.265	.8750	.180	.100	.506	.370	.137	.131
16	3PZ30–185	.276	.8750	.190	.109	.574	.433	.149	.143
18	3PZ40–201	.320	1.0000	.201	.115	.618	.474	.152	.146
20	3PZ40–9	.333	1.0000	.213	.118	.665	.527	.164	.158
24	3PZ40–26	.369	1.2500	.250	.133	.788	.652	.201	.195

REVISION	
PZCN–114	5–23–68
PZCN–123	8–1–69
PZCN–133	6–30–70
ECO–153	7–25–13

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TITLE: **POZIDRIV® PUNCHES FOR ROUND HEAD WOOD SCREWS**

DRAWN K. NIERMEYER	DATE 10–13–67	DRAWING NUMBER **PPZ-2**
CONFIRMED: L. DOUGAN	DATE 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

REFER TO PRINT PPZ–100 FOR DIMENSIONS

D ±.0005	K +.001 –.000	L +.000 –.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' –07' E	F	+.002 –.000 G	+15' –00' H	P	R
0	.0300 .0285	46° 00′	.0190 .0180	.032	7° 00′	.012 .008	.004 .003
1	.0500 .0480	46° 00′	.0290 .0280	.050	7° 00′	.012 .006	.005 .003
2	.0720 .0700	46° 00′	.0405 .0395	.090	5° 45′	.015 .009	.006 .003
3	.1070 .1050	56° 15′	.0560 .0550	.150	5° 45′	.020 .014	.010 .005
4	.1560 .1540	56° 15′	.0850 .0840	.198	7° 00′	.025 .019	.015 .008
5	.2460 .2440	56° 15′	.0960 .0950	.311	7° 00′	.030 .024	.035 .025

NOTES:

REFER TO PZFD–6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG–0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE–HALF THE TABULATED VALUES.

WOOD SCREWS

SCREW SIZE	PUNCH NO.	+.006 –.000 A	±.0005 D	REF J	+.002 –.000 M	+.005 –.000 N	+.005 –.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00–8	.066	.4375	.044	.014	.115	.127	.040	.035
1	3PZ00–9	.069	.4375	.047	.019	.142	.144	.043	.038
2	3PZ10–4	.104	.4375	.075	.020	.168	.186	.062	.057
3	3PZ10–5	.116	.4375	.087	.024	.195	.210	.074	.069
4	3PZ10–6	.128	.4375	.100	.026	.221	.248	.086	.081
5	3PZ20–7	.150	.4375	.095	.030	.247	.269	.074	.068
6	3PZ20–8	.170	.4375	.116	.033	.274	.301	.093	.087
7	3PZ20–9	.181	.5625	.128	.036	.300	.330	.105	.099
8	3PZ20–10	.197	.5625	.145	.040	.326	.352	.121	.115
9	3PZ20–11	.208	.5625	.156	.042	.352	.389	.132	.126
10	3PZ30–$\frac{147}{6}$	.253	.5625 / .8750	.163	.046	.379	.413	.125	.119
12	3PZ30–8	.275	.8750	.186	.053	.431	.464	.148	.142
14	3PZ30–9	.297	.8750	.210	.060	.484	.518	.170	.164
16	3PZ30–10	.324	1.0000	.238	.067	.536	.569	.197	.191
18	3PZ40–6	.373	1.0000	.255	.073	.589	.631	.205	.199
20	3PZ40–7	.392	1.0000	.276	.080	.641	.682	.225	.219
24	3PZ40–8	.428	1.2500	.311	.093	.746	.794	.261	.255

REVISION	
PZCN–89	2–9–67
PZCN–114	5–23–68
PZCN–133	6–30–70
ECO–153	7–25–13

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TITLE:

POZIDRIV® OVAL HEAD PUNCHES

DRAWN V.W. MOTTOLA	DATE 1–7–64	DRAWING NUMBER **PPZ-3**
CONFIRMED: L. DOUGAN	DATE 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 -.000	L +.000 -.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' -07' E	F	+.002 -.000 G	+15' -00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	+.006 -.000 A	±.0005 D	REF J	+.002 -.000 M	+.005 -.000 N	+.005 -.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00-8	.066	.4375	.044	.014	.115	.127	.040	.035
1	3PZ00-9	.069	.4375	.047	.019	.142	.144	.043	.038
2	3PZ10-4	.104	.4375	.075	.020	.168	.186	.062	.057
3	3PZ10-5	.116	.4375	.087	.024	.195	.210	.074	.069
4	3PZ10-6	.128	.4375	.100	.026	.221	.248	.086	.081
5	3PZ20-7	.150	.4375	.095	.030	.247	.269	.074	.068
6	3PZ20-8	.170	.4375	.116	.033	.274	.301	.093	.087
7	3PZ20-14	.175	.5625	.121	.036	.300	.330	.099	.093
8	3PZ20-12	.184	.5625	.130	.040	.326	.352	.108	.102
10	3PZ20-13	.201	.5625	.148	.046	.379	.413	.125	.119
12	3PZ30-11	.262	.8750	.171	.053	.431	.464	.135	.129
1/4	3PZ30-12	.282	.8750	.191	.062	.500	.535	.155	.149
5/16	3PZ40-13	.382	1.0000	.265	.078	.627	.669	.215	.209
3/8	3PZ40-10	.402	1.2500	.282	.096	.752	.784	.235	.229
7/16	3PZ40-11	.414	1.2500	.295	.110	.810	.801	.247	.241
1/2	3PZ40-12	.429	1.2500	.311	.121	.865	.833	.262	.256
9/16	3PZ40-143	.449	1.5000	.322	.120	.990	1.080	.285	.279
5/8	3PZ50-7	.561	1.5000	.365	.132	1.115	1.240	.300	.293
3/4	3PZ50-8	.622	1.5000	.427	.163	1.365	1.510	.362	.355

REVISION	
PZCN-66	11-15-65
PZCN-89	2-9-67
PZCN-114	5-23-68
PZCN-133	6-30-70
ECO-153	7-25-13

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TITLE:

POZIDRIV® OVAL HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
V.W. MOTTOLA	1-13-64	**PPZ-3A**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

MILLING ANGLE

D ±.0005	K +.001 -.000	L +.000 -.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' -07' E	F	+.002 -.000 G	+15' -00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

TYPE "A" TAPPING SCREWS

SCREW SIZE	PUNCH NO.	+.006 -.000 A	±.0005 D	REF J	+.002 -.000 M	+.005 -.000 N	+.005 -.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00-8	.066	.4375	.044	.014	.115	.127	.040	.035
1	3PZ00-9	.069	.4375	.047	.019	.142	.144	.043	.038
2	3PZ10-4	.104	.4375	.075	.020	.168	.186	.062	.057
3	3PZ10-5	.116	.4375	.087	.024	.195	.210	.074	.069
4	3PZ10-6	.128	.4375	.100	.026	.221	.248	.086	.081
5	3PZ20-7	.150	.4375	.095	.030	.247	.269	.074	.068
6	3PZ20-8	.170	.4375	.116	.033	.274	.301	.093	.087
7	3PZ20-14	.175	.5625	.121	.036	.300	.330	.099	.093
8	3PZ20-12	.184	.5625	.130	.040	.326	.352	.108	.102
10	3PZ20-13	.201	.5625	.148	.046	.379	.413	.125	.119
12	3PZ30-11	.262	.8750	.171	.053	.431	.464	.135	.129
14	3PZ30-13	.280	.8750	.190	.060	.484	.518	.153	.147
16	3PZ30-10	.324	1.0000	.238	.067	.536	.569	.197	.191
18	3PZ40-6	.373	1.0000	.255	.073	.589	.631	.205	.199
20	3PZ40-7	.392	1.0000	.274	.080	.641	.682	.225	.219
24	3PZ40-8	.428	1.2500	.311	.093	.746	.794	.261	.255

REVISION	
PZCN-89	2-13-67
PZCN-114	5-23-68
PZCN-133	6-30-70
ECO-153	7-25-13

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TITLE:

POZIDRIV®
OVAL HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
V.W. MOTTOLA	1-13-64	**PPZ-3B**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 -.000	L +.000 -.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' -07' E	F	+.002 -.000 G	+15' -00' H	P	R
0	.0300 .0285	46° 00′	.0190 .0180	.032	7° 00′	.012 .008	.004 .003
1	.0500 .0480	46° 00′	.0290 .0280	.050	7° 00′	.012 .006	.005 .003
2	.0720 .0700	46° 00′	.0405 .0395	.090	5° 45′	.015 .009	.006 .003
3	.1070 .1050	56° 15′	.0560 .0550	.150	5° 45′	.020 .014	.010 .005
4	.1560 .1540	56° 15′	.0850 .0840	.198	7° 00′	.025 .019	.015 .008
5	.2460 .2440	56° 15′	.0960 .0950	.311	7° 00′	.030 .024	.035 .025

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	+.006 -.000 A	±.0005 D	REF J	+.002 -.000 M	+.005 -.000 N	+.005 -.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00-8	.066	.4375	.044	.014	.115	.127	.040	.035
1	3PZ00-9	.069	.4375	.047	.019	.142	.144	.043	.038
2	3PZ10-4	.104	.4375	.075	.020	.168	.186	.062	.057
3	3PZ10-5	.116	.4375	.087	.024	.195	.210	.074	.069
4	3PZ10-6	.128	.4375	.100	.026	.221	.248	.086	.081
5	3PZ20-7	.150	.4375	.095	.030	.247	.269	.074	.068
6	3PZ20-8	.170	.4375	.116	.033	.274	.301	.093	.087
7	3PZ20-14	.175	.5625	.121	.036	.300	.330	.099	.093
8	3PZ20-12	.184	.5625	.130	.040	.326	.352	.108	.102
10	3PZ20-13	.201	.5625	.148	.046	.379	.413	.125	.119
12	3PZ30-11	.262	.8750	.171	.053	.431	.464	.135	.129
1/4	3PZ30-12	.282	.8750	.191	.062	.500	.535	.155	.149
5/16	3PZ40-254	.373	1.0000	.255	.078	.627	.669	.205	.199
3/8	3PZ40-255	.392	1.0000	.274	.098	.752	.770	.225	.219
7/16	3PZ40-256	.402	1.2500	.282	.102	.802	.839	.235	.229
1/2	3PZ40-257	.414	1.2500	.295	.110	.865	.905	.247	.241
9/16	3PZ40-143	.449	1.5000	.322	.120	.990	1.080	.285	.279
5/8	3PZ50-7	.561	1.5000	.365	.132	1.115	1.240	.300	.293
3/4	3PZ50-8	.622	1.5000	.427	.163	1.365	1.510	.362	.355

REVISION	
PZCN-114 5-23-68	ECO-153 7-25-13

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TITLE:

POZIDRIV® UNDERCUT OVAL HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
L.A. PROULX	2-21-67	**PPZ-3C**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 -.000	L +.000 -.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' -07' E	F	+.002 -.000 G	+15' -00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

TYPE "A" TAPPING SCREWS

SCREW SIZE	PUNCH NO.	+.006 -.000 A	±.0005 D	REF J	+.002 -.000 M	+.005 -.000 N	+.005 -.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00-8	.066	.4375	.044	.014	.115	.127	.040	.035
1	3PZ00-9	.069	.4375	.047	.019	.142	.144	.043	.038
2	3PZ10-4	.104	.4375	.075	.020	.168	.186	.062	.057
3	3PZ10-5	.116	.4375	.087	.024	.195	.210	.074	.069
4	3PZ10-6	.128	.4375	.100	.026	.221	.248	.086	.081
5	3PZ20-7	.150	.4375	.095	.030	.247	.269	.074	.068
6	3PZ20-8	.170	.4375	.116	.033	.274	.301	.093	.087
7	3PZ20-14	.175	.5625	.121	.036	.300	.330	.099	.093
8	3PZ20-12	.184	.5625	.130	.040	.326	.352	.108	.102
10	3PZ20-13	.201	.5625	.148	.046	.379	.413	.125	.119
12	3PZ30-11	.262	.8750	.171	.053	.431	.464	.135	.129
14	3PZ30-13	.280	.8750	.190	.060	.484	.518	.153	.147
16	3PZ30-142	.299	1.0000	.210	.067	.536	.569	.172	.166
18	3PZ40-145	.356	1.0000	.235	.073	.589	.631	.188	.182
20	3PZ40-13	.382	1.0000	.263	.078	.627	.669	.215	.209
24	3PZ40-7	.392	1.0000	.274	.080	.641	.682	.225	.219

REVISION	
PZCN-36	4-27-64
PZCN-89	2-24-67
PZCN-114	5-23-68
ECO-153	7-25-13

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TITLE:

POZIDRIV® UNDERCUT OVAL HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
V.W. MOTTOLA	1-7-64	**PPZ-3D**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

REFER TO PRINT PPZ–100 FOR DIMENSIONS

D ±.0005	K +.001 –.000	L +.000 –.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' –07' E	F	+.002 –.000 G	+15' –00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

NOTES:

REFER TO PZFD–6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG–0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE–HALF THE TABULATED VALUES.

MACHINE & TAPPING SCREWS

	SCREW SIZE	PUNCH NO.	+.006 –.000 A	±.0005 D	REF J	+.002 –.000 M	+.005 –.000 N	+.005 –.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
	4 WITH 3 HEAD	3PZ10–5	.116	.4375	.087	.024	.195	.210	.074	.069
	5 WITH 4 HEAD	3PZ10–6	.128	.4375	.100	.026	.221	.248	.086	.081
	6 WITH 4 HEAD	3PZ10–6	.128	.4375	.100	.026	.221	.248	.086	.081
	6 WITH 5 HEAD	3PZ20–7	.150	.4375	.095	.030	.247	.269	.074	.068
*	6 WITH 5 HEAD	3PZ20–176	.161	.4375	.108	.030	.247	.269	.084	.078
	8 WITH 5 HEAD	3PZ20–7	.150	.4375	.095	.030	.247	.269	.074	.068
*	8 WITH 5 HEAD	3PZ20–176	.161	.4375	.108	.030	.247	.269	.084	.078
	8 WITH 6 HEAD	3PZ20–8	.170	.4375	.116	.033	.274	.301	.093	.087
*	8 WITH 6 HEAD	3PZ20–28	.186	.5625	.135	.033	.274	.301	.109	.103
	10 WITH 8 HEAD	3PZ20–12	.184	.5625	.130	.040	.326	.352	.108	.102
*	10 WITH 8 HEAD	3PZ20–255	.199	.5625	.148	.040	.326	.352	.122	.116
	12 WITH 8 HEAD	3PZ20–12	.184	.5625	.130	.040	.326	.352	.108	.102
*	12 WITH 8 HEAD	3PZ20–255	.199	.5625	.148	.040	.326	.352	.122	.116
	12 WITH 10 HEAD	3PZ20–13	.201	.5625	.148	.046	.379	.413	.125	.119
*	12 WITH 10 HEAD	3PZ20–256	.212	.5625	.160	.046	.379	.413	.136	.130
	1/4 14 WITH 10 HEAD	3PZ20–13	.201	.5625	.148	.046	.379	.413	.125	.119
*	1/4 14 WITH 10 HEAD	3PZ20–256	.212	.5625	.160	.046	.379	.413	.136	.130
	1/4 14 WITH 12 HEAD	3PZ30–11	.262	.8750	.171	.053	.431	.464	.135	.129

* THESE PUNCHES USED FOR SCREWS WITH SHOULDER

REVISION	
PZCN–37	4–28–64
PZCN–89	2–24–67
PZCN–114	5–23–68
ECO–153	7–25–13

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TITLE:

POZIDRIV ®
OVAL TRIM HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
V.W. MOTTOLA	1–22–64	**PPZ-3E**
CONFIRMED: L. DOUGAN	DATE 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 −.000	L +.000 −.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000		
1.2500		
1.5000	↓	↓
2.0000	NO PIN SLOT	

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' −07' E	F	+.002 −.000 G	+15' −00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	+.006 −.000 A	±.0005 D	REF J	+.002 −.000 M	+.005 −.000 N	+.005 −.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00-20	.059	.4375	.040	.012	.090	.091	.033	.028
1	3PZ00-21	.066	.4375	.046	.015	.111	.111	.040	.035
2	3PZ10-35	.096	.4375	.068	.018	.132	.132	.053	.048
3	3PZ10-37	.104	.4375	.077	.020	.153	.150	.062	.057
4	3PZ10-36	.114	.4375	.087	.024	.175	.173	.072	.067
5	3PZ20-265	.132	.4375	.078	.027	.196	.191	.054	.048
6	3PZ30-257	.154	.4375	.103	.031	.217	.207	.076	.070
7	3PZ20-278	.162	.5625	.111	.034	.239	.228	.085	.079
8	3PZ20-266	.169	.5625	.118	.038	.260	.244	.092	.086
10	3PZ20-258	.185	.5625	.135	.044	.303	.284	.108	.102
12	3PZ30-68	.246	.8750	.160	.050	.346	.323	.117	.111
1/4	3PZ30-67	.265	.8750	.180	.059	.402	.373	.137	.131
5/16	3PZ30-69	.307	.8750	.220	.064	.504	.527	.181	.175
3/8	3PZ40-162	.369	1.0000	.250	.075	.606	.652	.201	.195
7/16	3PZ40-163	.391	1.2500	.271	.062	.607	.782	.225	.219
1/2	3PZ40-164	.412	1.2500	.290	.076	.730	.917	.247	.241
9/16	3PZ40-142	.443	1.5000	.324	.085	.790	.960	.277	.271
5/8	3PZ50-5	.557	1.5000	.369	.095	.850	.995	.295	.288
3/4	3PZ50-6	.601	1.5000	.415	.111	.970	1.115	.341	.334

REVISION				
PZCN-67 11-23-65	PZCN-89 2-27-67	PZCN-114 5-23-68	ECO-153 7-25-13	

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TITLE:

POZIDRIV®
FINISHED FILLISTER HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
L.A. PROULX	9-9-64	**PPZ-4**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 −.000	L +.000 −.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' −07' E	F	+.002 −.000 G	+15' −00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

TYPE "A" TAPPING SCREWS

SCREW SIZE	PUNCH NO.	+.006 −.000 A	±.0005 D	REF J	+.002 −.000 M	+.005 −.000 N	+.005 −.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00-20	.059	.4375	.040	.012	.090	.091	.033	.028
1	3PZ00-21	.066	.4375	.046	.015	.111	.111	.040	.035
2	3PZ10-35	.096	.4375	.068	.018	.132	.132	.053	.048
3	3PZ10-37	.104	.4375	.077	.020	.153	.150	.062	.057
4	3PZ10-36	.114	.4375	.087	.024	.175	.173	.072	.067
5	3PZ20-265	.132	.4375	.078	.027	.196	.191	.054	.048
6	3PZ20-257	.154	.4375	.103	.031	.217	.207	.076	.070
7	3PZ20-278	.162	.5625	.111	.034	.239	.228	.085	.079
8	3PZ20-266	.169	.5625	.118	.038	.260	.244	.092	.086
10	3PZ20-258	.185	.5625	.135	.044	.303	.284	.108	.102
12	3PZ30-68	.246	.8750	.160	.050	.346	.323	.117	.111
14	3PZ30-67	.265	.8750	.180	.059	.402	.373	.137	.131

REVISION

ECO-153	7-25-13
PZCN-114	5-23-66
PZCN-89	2-27-67

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TITLE: **POZIDRIV ® FINISHED FILLISTER HEAD PUNCHES**

DRAWN	DATE	DRAWING NUMBER
L.A. PROULX	4-14-65	**PPZ-4A**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 -.000	L +.000 -.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' -07' E	F	+.002 -.000 G	+15' -00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 00'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	+.006 -.000 A	±.0005 D	REF J	+.002 -.000 M	+.005 -.000 N	+.005 -.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00-14	.059	.4375	.040	.028	.131	.091	.033	.028
1	3PZ00-15	.066	.4375	.046	.034	.160	.111	.040	.035
2	3PZ10-13	.096	.4375	.068	.040	.190	.132	.053	.048
3	3PZ10-14	.104	.4375	.077	.045	.215	.150	.062	.057
4	3PZ10-15	.114	.4375	.087	.049	.241	.173	.072	.067
5	3PZ20-346	.132	.4375	.078	.053	.264	.191	.054	.048
6	3PZ20-21	.154	.4375	.103	.055	.280	.207	.076	.070
7	3PZ20-22	.162	.5625	.111	.064	.317	.228	.085	.079
8	3PZ20-23	.169	.5625	.118	.072	.346	.244	.092	.086
10	3PZ20-25	.185	.5625	.135	.087	.409	.284	.108	.102
12	3PZ30-21	.246	.8750	.160	.096	.459	.323	.117	.111
1/4	3PZ30-22	.265	.8750	.180	.105	.519	.373	.137	.131
5/16	3PZ30-140	.307	.8750	.220	.125	.676	.527	.181	.175
3/8	3PZ40-26	.369	1.2500	.250	.133	.788	.652	.201	.195
7/16	3PZ40-27	.391	1.2500	.271	.147	.913	.782	.225	.219
1/2	3PZ40-28	.412	1.5000	.290	.162	1.038	.917	.247	.241
9/16	3PZ40-281	.443	1.5000	.324	.178	1.112	.960	.277	.271
5/8	3PZ50-15	.557	1.5000	.369	.200	1.195	.995	.295	.288
3/4	3PZ50-16	.601	2.0000	.415	.236	1.372	1.115	.341	.334

REVISION	
PZCN-114	5-23-68
PZCN-121	3-3-69
ECO-153	7-25-13

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TITLE: **POZIDRIV ® SHAVED FILLISTER HEAD PUNCHES**

DRAWN	DATE	DRAWING NUMBER
L.A. PROULX	3-1-67	**PPZ-4B**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 -.000	L +.000 -.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	E +00' -07'	F	G +.002 -.000	H +15' -00'	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

MACHINE SCREWS AND ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	A +.006 -.000	D ±.0005	J +.006 -.000	M +.002 -.000	N +.005 -.000	O +.005 -.000	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00-14	.059	.4375	.040	.028	.131	.091	.033	.028
1	3PZ00-15	.066	.4375	.046	.034	.160	.111	.040	.035
2	3PZ10-13	.096	.4375	.068	.040	.190	.132	.053	.048
3	3PZ10-14	.104	.4375	.077	.045	.215	.150	.062	.057
4	3PZ10-15	.114	.4375	.087	.049	.241	.173	.072	.067
5	3PZ20-20	.146	.4375	.095	.053	.264	.191	.068	.062
6	2PZ20-21	.154	.4375	.103	.055	.280	.207	.076	.070
7	3PZ20-22	.162	.5625	.111	.064	.317	.228	.085	.079
8	3PZ20-23	.169	.5625	.118	.072	.346	.244	.092	.086
10	3PZ20-25	.185	.5625	.135	.087	.409	.284	.108	.102
12	3PZ30-21	.246	.8750	.160	.096	.459	.323	.117	.111
1/4	3PZ30-22	.265	.8750	.180	.105	.519	.373	.137	.131
5/16	3PZ40-9	.333	1.0000	.213	.118	.665	.527	.164	.158
3/8	3PZ40-26	.369	1.2500	.250	.133	.788	.652	.201	.195
7/16	3PZ40-27	.391	1.2500	.271	.147	.913	.782	.224	.218
1/2	3PZ40-28	.412	1.5000	.290	.162	1.038	.917	.246	.240

REVISION	
PZCN-44	9-15-64
PZCN-89	2-28-67
PZCN-114	5-23-68
PZCN-121	3-3-69
ECO-153	7-25-13

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TITLE:

POZIDRIV®
PAN HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
V.W. MOTTOLA	1-22-64	**PPZ-5**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

IDENTIFICATION GROOVE

REFER TO PRINT PPZ–100 FOR DIMENSIONS

MILLING ANGLE

D ±.0005	K +.001 –.000	L +.000 –.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' –.07' E	F	+.002 –.000 G	+15' –00' H	P	R
0	.0300 .0285	46° 00′	.0190 .0180	.032	7° 00′	.012 .008	.004 .003
1	.0500 .0480	46° 00′	.0290 .0280	.050	7° 00′	.012 .006	.005 .003
2	.0720 .0700	46° 00′	.0405 .0395	.090	5° 45′	.015 .009	.006 .003
3	.1070 .1050	56° 15′	.0560 .0550	.150	5° 45′	.020 .014	.010 .005
4	.1560 .1540	56° 15′	.0850 .0840	.198	7° 00′	.025 .019	.015 .008
5	.2460 .2440	56° 15′	.0960 .0950	.311	7° 00′	.030 .024	.035 .025

NOTES:

REFER TO PZFD–6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG–0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE–HALF THE TABULATED VALUES.

TAPPING SCREW TYPE "A"

SCREW SIZE	PUNCH NO.	+.006 –.000 A	±.0005 D	REF J	+.002 –.000 M	+.005 –.000 N	+.005 –.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00–14	.059	.4375	.040	.028	.131	.091	.033	.028
1	3PZ00–15	.066	.4375	.046	.034	.160	.111	.040	.035
2	3PZ10–13	.096	.4375	.068	.040	.190	.132	.053	.048
3	3PZ10–14	.104	.4375	.077	.045	.215	.150	.062	.057
4	3PZ10–15	.114	.4375	.087	.049	.241	.173	.072	.067
5	3PZ20–20	.146	.4375	.095	.053	.264	.191	.068	.062
6	2PZ20–21	.154	.4375	.103	.055	.280	.207	.076	.070
7	3PZ20–22	.162	.5625	.111	.064	.317	.228	.085	.079
8	3PZ20–23	.169	.5625	.118	.072	.346	.244	.092	.086
10	3PZ20–25	.185	.5625	.135	.087	.409	.284	.108	.102
12	3PZ30–21	.246	.8750	.160	.096	.459	.323	.117	.111
14	3PZ30–226	.265	.8750	.180	.100	.506	.370	.137	.131
16	3PZ30–185	.276	.8750	.190	.109	.574	.433	.149	.143
18	3PZ40–201	.320	1.0000	.201	.115	.618	.474	.152	.146
20	3PZ40–9	.333	1.0000	.213	.118	.665	.527	.164	.158
24	3PZ40–26	.369	1.2500	.250	.133	.788	.652	.201	.195

REVISION	
PZCN–44	9–15–64
PZCN–89	2–29–67
PZCN–114	5–23–68
ECO–153	7–25–13

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TITLE:

POZIDRIV® PAN HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
V.W. MOTTOLA	1–23–64	**PPZ-5A**
CONFIRMED: L. DOUGAN	DATE 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 –.000	L +.000 –.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' –.07' E	F	+.002 –.000 G	+15' –00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

NOTES:

REFER TO PZFD–6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG–0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE–HALF THE TABULATED VALUES.

WOOD SCREWS

SCREW SIZE	PUNCH NO.	+.006 –.000 A	±.0005 D	REF J	+.002 –.000 M	+.005 –.000 N	+.005 –.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00–14	.059	.4375	.040	.028	.131	.091	.033	.028
1	3PZ00–15	.066	.4375	.046	.034	.160	.111	.040	.035
2	3PZ10–13	.096	.4375	.068	.040	.190	.132	.053	.048
3	3PZ10–14	.104	.4375	.077	.045	.215	.150	.062	.057
4	3PZ10–15	.114	.4375	.087	.049	.241	.173	.072	.067
5	3PZ20–20	.146	.4375	.095	.053	.264	.191	.068	.062
6	3PZ20–21	.154	.4375	.103	.055	.280	.207	.076	.070
7	3PZ20–22	.162	.5625	.111	.064	.317	.228	.085	.079
8	3PZ20–23	.169	.5625	.118	.072	.346	.244	.092	.086
9	3PZ20–24	.177	.5625	.126	.082	.382	.263	.100	.094
10	3PZ20–25	.185	.5625	.135	.087	.409	.284	.108	.102
12	3PZ30–21	.246	.8750	.160	.096	.459	.323	.117	.111
14	3PZ30–22	.265	.8750	.180	.105	.519	.373	.137	.131
16	3PZ30–185	.276	.8750	.190	.109	.574	.433	.149	.143
18	3PZ40–201	.320	1.0000	.201	.115	.616	.474	.152	.146
20	3PZ40–9	.333	1.0000	.213	.118	.665	.527	.164	.158
24	3PZ40–26	.369	1.2500	.250	.133	.788	.652	.201	.195

REVISION	
PZCN–44	9–15–64
PZCN–89	3–29–67
PZCN–114	5–23–68
ECO–153	7–25–13

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TITLE:

POZIDRIV ®
FILLISTER HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
L.A. PROULX	5–29–64	**PPZ-5B**
CONFIRMED: L. DOUGAN	DATE 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

NOTE: SLOT DEPTHS AS SHOWN ARE INTENDED TO BE METAL TO METAL MEASUREMENTS.

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' −.07' E	F	+.002 −.000 G	+15' −00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

D ±.0005	K +.001 −.000	L +.000 −.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	+.006 −.000 A	±.0005 D	REF J	+.002 −.000 M	+.005 −.000 N	+.005 −.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN	SLOT ±.001 WIDTH	SLOT ±.001 DEPTH
0	3PZ00-22	.059	.4375	.040	.028	.131	.091	.033	.028	.019	.018
1	3PZ00-23	.066	.4375	.046	.034	.160	.111	.040	.035	.022	.022
2	3PZ10-154	.096	.4375	.068	.040	.190	.132	.053	.048	.027	.028
3	3PZ10-155	.104	.4375	.077	.045	.215	.150	.062	.057	.031	.031
4	3PZ10-156	.114	.4375	.087	.049	.241	.173	.072	.067	.035	.035
5	3PZ20-551	.146	.4375	.095	.053	.264	.191	.068	.062	.039	.041
6	3PZ20-552	.154	.4375	.103	.055	.280	.207	.076	.070	.044	.044
7	3PZ20-553	.162	.5625	.111	.064	.317	.228	.085	.079	.044	.046
8	3PZ20-554	.169	.5625	.118	.072	.346	.244	.092	.086	.049	.051
10	3PZ20-555	.185	.5625	.135	.087	.409	.284	.108	.102	.055	.058
12	3PZ30-236	.246	.8750	.160	.096	.459	.323	.117	.111	.061	.069
1/4	3PZ30-237	.265	.8750	.180	.105	.519	.373	.137	.131	.070	.079
5/16	3PZ40-267	.333	1.0000	.213	.118	.665	.527	.164	.158	.078	.095
3/8		.369	1.2500	.250	.133	.788	.652	.201	.195		
7/16		.391	1.2500	.271	.147	.913	.782	.225	.219		
1/2		.412	1.5000	.290	.162	1.038	.917	.246	.240		

REVISION	
ECO-153	7-25-13
PZCN-154	4-10-75
PZCN-114	5-23-68
PZCN-89	3-29-67

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TITLE:

COMBINATION POZIDRIV® - SLOTTED PAN HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
R.H. SOMERS	2-3-65	**PPZ-5C**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' -.07' E	F	+.002 -.000 G	+15' -00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

NOTE: SLOT DEPTHS AS SHOWN ARE INTENDED TO BE METAL TO METAL MEASUREMENTS.

D ±.0005	K +.001 -.000	L +.000 -.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

TAPPING SCREWS TYPE "A"

SCREW SIZE	PUNCH NO.	+.006 -.000 A	±.0005 D	REF J	+.002 -.000 M	+.005 -.000 N	+.005 -.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN	SLOT ±.001 WIDTH	SLOT ±.001 DEPTH
0	3PZ00-22	.059	.4375	.040	.028	.131	.091	.033	.028	.019	.018
1	3PZ00-23	.066	.4375	.046	.034	.160	.111	.040	.035	.022	.022
2	3PZ10-154	.096	.4375	.068	.040	.190	.132	.053	.048	.027	.028
3	3PZ10-155	.104	.4375	.077	.045	.215	.150	.062	.057	.031	.031
4	3PZ10-156	.114	.4375	.087	.049	.241	.173	.072	.067	.035	.035
5	3PZ20-551	.146	.4375	.095	.053	.264	.191	.068	.062	.039	.041
6	3PZ20-552	.154	.4375	.103	.055	.280	.207	.076	.070	.044	.044
7	3PZ20-553	.162	.5625	.111	.064	.317	.228	.085	.079	.044	.046
8	3PZ20-554	.169	.5625	.118	.072	.346	.244	.092	.086	.049	.051
10	3PZ20-555	.185	.5625	.135	.087	.409	.284	.108	.102	.055	.058
12	3PZ30-236	.246	.8750	.160	.096	.459	.323	.117	.111	.061	.069
14	3PZ30-249	.265	.8750	.180	.100	.506	.370	.137	.131	.070	.077
16	3PZ30-247	.276	.8750	.190	.109	.574	.433	.149	.143	.069	.082
18	3PZ40-276	.320	1.0000	.201	.115	.618	.474	.152	.146	.078	.090
20	3PZ40-277	.333	1.0000	.213	.118	.665	.527	.164	.158	.078	.098
24	3PZ40-278	.369	1.2500	.250	.133	.788	.652	.201	.195	.087	.112

REVISION	
PZCN-89	3-29-67
PZCN-114	5-23-68
PZCN-154	4-10-75
ECO-153	7-25-13

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TITLE:

COMBINATION POZIDRIV® - SLOTTED PAN HEAD PUNCHES

DRAWN L.W. WHITE	DATE 11-5-65	DRAWING NUMBER **PPZ-5D**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

NOTE: SLOT DEPTHS AS SHOWN ARE INTENDED TO BE METAL TO METAL MEASUREMENTS.

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' −.07' E	F	+.002 −.000 G	+15' −00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

D ±.0005	K +.001 −.000	L +.000 −.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	+.006 −.000 A	±.0005 D	REF J	+.002 −.000 M	+.005 −.000 N	+.005 −.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN	SLOT ±.001 WIDTH	SLOT ±.001 DEPTH
4											
5	3PZ20−631	.151	.4375	.105	.060	.247	.157	.072	.066	.038	.054
6	3PZ20−633	.170	.4375	.125	.060	.274	.186	.092	.086	.043	.050
7											
8	3PZ20−634	.184	.5625	.139	.075	.326	.215	.106	.100	.049	.062
10											

NOTES:

REFER TO PZFD−6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG−0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE−HALF THE TABULATED VALUES.

REVISION ECO−153 7−25−13

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TITLE:

COMBINATION POZIDRIV® - SLOTTED OVAL HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
K.N.	11−4−70	**PPZ-5E**
CONFIRMED: L. DOUGAN	DATE 11−7−11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774−396−6190 FAX: 508−966−2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

REFER TO PRINT PPZ-100 FOR DIMENSIONS

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' -.07' E	F	+.002 -.000 G	+15' -00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

D ±.0005	K +.001 -.000	L +.000 -.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

NOTE:

REFER TO PZFD-6A FOR ADDITIONAL FRONT DETAILS
ANGES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT
WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	+.006 -.000 A	±.0005 D	REF J	+.002 -.000 M	+.005 -.000 N	+.005 -.000 O	REF X	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00-16	.054	.4375	.031	.019	.130	.097	.067	.030	.025
1	3PZ00-17	.062	.4375	.039	.027	.162	.116	.073	.038	.033
2	3PZ10-100	.090	.4375	.053	.028	.190	.132	.111	.049	.044
3	3PZ10-101	.097	.4375	.060	.029	.231	.184	.129	.056	.051
4	3PZ10-102	.100	.4375	.063	.039	.257	.187	.133	.059	.054
5	3PZ10-103	.116	.4375	.079	.044	.289	.211	.147	.075	.070
6	3PZ20-338/321	.140	.4375/.5625	.074	.046	.321	.231	.183	.065	.059
7	3PZ20-322	.147	.5625	.081	.051	.352	.256	.194	.072	.066
8	3PZ20-323	.154	.5625	.088	.059	.384	.275	.202	.079	.073
9	3PZ20-340	.162	.8750	.096	.067	.415	.293	.208	.087	.081
10	3PZ20-324/339	.170	.8750/.7500	.104	.075	.448	.314	.215	.095	.089
12	3PZ30-167	.226	.8750	.116	.080	.511	.351	.285	.101	.095
1/4	3PZ30-168/180	.240	.8750/1.0000	.130	.095	.573	.391	.297	.115	.109
5/16	3PZ40-172/189	.325	1.0000/1.2500	.178	.113	.698	.468	.393	.161	.155
3/8	3PZ40-173	.356	1.2500	.209	.144	.823	.546	.425	.192	.186
7/16	3PZ40-174	.386	1.2500	.239	.170	.948	.634	.459	.223	.217
1/2	3PZ40-175	.414	1.5000	.268	.199	1.073	.716	.488	.251	.245
9/16	3PZ40-329	.419	1.5000	.275	.230	1.198	.801	.495	.256	.250
5/8	3PZ50-17	.523	1.5000	.296	.246	1.323	.885	.593	.266	.259
3/4	3PZ50-18	.560	2.0000	.353	.304	1.573	1.047	.651	.323	.316

REVISION	
ECO-153	7-25-13
PZCN-114	5-23-68
PZCN-106	10-18-67

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TITLE:

POZIDRIV® FLAT TOP TRUSS HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
L.A. PROULX	4-5-67	**PPZ-6B**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 −.000	L +.000 −.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000		
1.2500		
1.5000		
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' −.07' E	F	+.002 −.000 G	+15' −00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

TYPE "A" TAPPING SCREWS

SCREW SIZE	PUNCH NO.	+.006 −.000 A	±.0005 D	REF J	+.002 −.000 M	+.005 −.000 N	+.005 −.000 O	REF X	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00−16	.054	.4375	.031	.019	.130	.097	.067	.030	.025
1	3PZ00−17	.062	.4375	.039	.027	.162	.116	.073	.038	.033
2	3PZ10−100	.090	.4375	.053	.028	.190	.132	.111	.049	.044
3	3PZ10−101	.097	.4375	.060	.029	.231	.184	.129	.056	.051
4	3PZ10−102	.100	.4375	.063	.039	.257	.187	.133	.059	.054
5	3PZ10−103	.116	.4375	.079	.044	.289	.211	.147	.075	.070
6	3PZ20−338/321	.140	.4375/.5625	.074	.046	.321	.231	.183	.065	.059
7	3PZ20−322	.147	.5625	.081	.051	.352	.256	.194	.072	.066
8	3PZ20−323	.154	.5625	.088	.059	.384	.275	.202	.079	.073
9	3PZ20−340	.162	.8750	.096	.067	.415	.293	.208	.087	.061
10	3PZ20−324/339	.170	.8750/.7500	.104	.075	.448	.314	.215	.095	.089
12	3PZ30−167	.226	.8750	.116	.080	.511	.351	.285	.101	.095
14	3PZ30−227/228	.240	.8750/1.0000	.130	.091	.557	.381	.296	.115	.109
16	3PZ30−184	.248	1.0000	.138	.101	.609	.419	.312	.123	.117
18	3PZ40−199	.298	1.0000	.151	.101	.661	.452	.385	.133	.127
20	3PZ40−200	.328	1.0000	.181	.113	.713	.487	.387	.164	.158
24	3PZ40−173	.356	1.2500	.209	.144	.823	.546	.425	.192	.186

REVISION	
PZCN−89	4−5−67
PZCN−106	10−18−67
PZCN−114	5−23−68
ECO−153	7−25−13

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TITLE:

POZIDRIV® FLAT TOP TRUSS HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
V.W. MOTTOLA	1−24−64	**PPZ-6C**
CONFIRMED: L. DOUGAN	DATE 11−7−11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774−396−6190 FAX: 508−966−2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 −.000	L +.000 −.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' −.07' E	F	+.002 −.000 G	+15' −00' H	P	R
0	.0300 .0285	46° 00′	.0190 .0180	.032	7° 00′	.012 .008	.004 .003
1	.0500 .0480	46° 00′	.0290 .0280	.050	7° 00′	.012 .006	.005 .003
2	.0720 .0700	46° 00′	.0405 .0395	.090	5° 45′	.015 .009	.006 .003
3	.1070 .1050	56° 15′	.0560 .0550	.150	5° 45′	.020 .014	.010 .005
4	.1560 .1540	56° 15′	.0850 .0840	.198	7° 00′	.025 .019	.015 .008
5	.2460 .2440	56° 15′	.0960 .0950	.311	7° 00′	.030 .024	.035 .025

MACHINE SCREW & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	+.006 −.000 A	±.0005 D	REF J	+.002 −.000 M	+.005 −.000 N	+.005 −.000 O	±.002 R	MIN. FACE Y	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
4	3PZ10−25	.114	.4375	.095	.054	.177	.100	.020	.312	.070	.065
5	3PZ20−45	.127	.4375	.089	.050	.198	.123	.030	.344	.048	.042
6	3PZ20−46	.141	.4375	.095	.057	.218	.133	.030	.344	.062	.056
7	3PZ20−47	.146	.5625	.101	.072	.238	.134	.030	.406	.067	.061
8	3PZ20−48	.154	.5625	.110	.077	.259	.147	.030	.438	.075	.069
10	3PZ20−49	.170	.5625	.127	.090	.300	.170	.030	.469	.091	.085
12	3PZ30−42	.225	.8750	.149	.095	.346	.201	.040	.531	.093	.087
14	3PZ30−39	.235	.8750	.159	.114	.382	.217	.040	.625	.103	.097
1/4	3PZ30−43	.237	.8750	.160	.115	.394	.226	.040	.625	.105	.099
5/16	3PZ30−44	.282	1.0000	.210	.148	.494	.280	.040	.781	.152	.146
3/8	3PZ40−36	.336	1.2500	.236	.179	.593	.335	.050	.906	.164	.158
7/16	3PZ40−37	.353	1.2500	.250	.208	.691	.391	.050	1.031	.182	.176
1/2	3PZ40−38	.369	1.2500	.264	.238	.790	.447	.050	1.188	.199	.193

NOTES:

REFER TO PZFD−6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG−0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE−HALF THE TABULATED VALUES.

REVISION		
PZCN−114	5−23−68	
PZCN−133	6−30−70	
ECO−153	7−25−13	

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TITLE:

POZIDRIV ® WASHER HEAD PUNCHES

DRAWN L.A. PROULX	DATE 11−1−65	DRAWING NUMBER **PPZ-7**
CONFIRMED: L. DOUGAN	DATE 11−7−11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774−396−6190 FAX: 508−966−2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' -.07' E	F	+.002 -.000 G	+15' -00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

MACHINE SCREWS & ALL TAPPING EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	+.006 -.000 A	±.0005 D	REF J	+.002 -.000 M	+.005 -.000 N	+.005 -.000 O	±.002 S	REF X	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
4	3PZ10-	.125	.4375	.088	.051	.216	.113	.020	.151	.084	.079
6	3PZ20-576	.159	.5625	.093	.057	.266	.141	.030	.191	.084	.078
8	3PZ20-596	.178	.5625	.113	.070	.316	.172	.030	.205	.103	.097
10	3PZ20-592/597	.205	.8750/.5625	.139	.080	.366	.201	.030	.235	.131	.125
1/4	3PZ30-275	.272	.8750	.162	.118	.484	.252	.040	.335	.148	.142
5/16	3PZ40-294	.352	1.0000	.207	.147	.602	.317	.040	.399	.188	.182

PUNCHES FOR THE NO.2 RECESS SIZE MAY BE OBTAINED, AS SPECIALS, WITH .003 INCH OVERSIZE B,G, AND F DIMENSIONS TO ACCOMMODATE HEAVY (CHROME) PLATING THICKNESS PER GM G112-M20. THE OVERSIZE PUNCHES WILL BE IDENTIFIED BY TWO DOTS 180° APART AND A CODE NUMBER OF 21 IN PLACE OF THE STANDARD 20 DESIGNATION.
FOR EXAMPLE, USE 3PZ21-596 PUNCHES INSTEAD OF 3PZ20-596 PUNCHES FOR PARTS REQUIRING HEAVY PLATING.

NOTE: THESE PUNCHES ARE SUPPLIED WITHOUT PIN SLOTS AND MUST BE USED WITH PRESS FIT ADAPTORS.

REVISION	
PZCN-89	2-1-67
PZCN-89	3-17-67
PZCN-89	4-13-67
PZCN-114	5-23-68
PZCN-121	3-3-69
PZCN-137	9-8-71
ECO-31	10-20-81
ECO-153	7-25-13

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TITLE:

POZIDRIV® FLAT TOP LARGE WASHER HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
L.A. PROULX	1-14-66	**PPZ-7A**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 –.000	L +.000 –.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' –.07' E	F	+.002 –.000 G	+15' –00' H	P	R
0	.0300 .0285	46° 00′	.0190 .0180	.032	7° 00′	.012 .008	.004 .003
1	.0500 .0480	46° 00′	.0290 .0280	.050	7° 00′	.012 .006	.005 .003
2	.0720 .0700	46° 00′	.0405 .0395	.090	5° 45′	.015 .009	.006 .003
3	.1070 .1050	56° 15′	.0560 .0550	.150	5° 45′	.020 .014	.010 .005
4	.1560 .1540	56° 15′	.0850 .0840	.198	7° 00′	.025 .019	.015 .008
5	.2460 .2440	56° 15′	.0960 .0950	.311	7° 00′	.030 .024	.035 .025

NOTES:

REFER TO PZFD–6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG–0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE–HALF THE TABULATED VALUES.

MACHINE & TAPPING SCREWS

SCREW SIZE	PUNCH NO.	+.006 –.000 A	±.0005 D	REF J	+.002 –.000 M	+.005 –.000 N	+.005 –.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00–24	.059	.4375	.038	.016	.141	.160	.034	.029
1	3PZ00–25	.066	.4375	.045	.019	.168	.194	.041	.037
2	3PZ10–63	.096	.4375	.060	.022	.196	.231	.054	.049
3	3PZ10–64	.101	.4375	.070	.026	.223	.258	.059	.054
4	3PZ10–62	.109	.4375	.078	.028	.250	.293	.068	.063
5	3PZ20–144	.136	.5625	.078	.035	.276	.298	.059	.053
6	2PZ20–133	.148	.5625	.090	.038	.312	.339	.072	.066
8	3PZ20–145	.173	.5625	.116	.042	.360	.404	.097	.091
10	3PZ20–143	.191	.5625	.135	.053	.416	.453	.115	.109
12	3PZ30–96	.252	.8750	.158	.057	.472	.521	.125	.119
1/4	3PZ30–97	.266	.8750	.173	.073	.531	.520	.139	.133
5/16	3PZ40–107	.331	1.0000	.207	.092	.663	.648	.163	.157
3/8	3PZ40–108	.379	1.0000	.255	.097	.790	.861	.213	.207

REVISION

ECO–153	7–25–13
PZCN–133	6–30–70
PZCN–114	5–23–68
PZCN–89	1–28–67

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TITLE:

POZIDRIV ®
BINDING HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
J.P. COSTANZA	1–26–67	**PPZ-8**
CONFIRMED: L. DOUGAN	DATE 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

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D ±.0005	K +.001 −.000	L +.000 −.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

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THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' −07' E	F	+.002 −.000 G	+15' −00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

SCREW SIZE	PUNCH NO.	DESCRIPTION	+.006 −.000 A	±.0005 D	REF J	+.002 M	+.005 −.000 N	+.005 −.000 U	MIN. FACE DIA Y	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
	2Z75		.210	.5625	.144				.385	.136	.130
6	3PZ20-649	#6 FLAT TOP PAN (CHEESE) HEAD	.152	.5625	.086	.064	.250	.227	.385	.077	.071
12	3PZ30-46	#12 100° FLAT HEAD	.235	.8750	.125	—	—	—	.438	.110	.104
8	3PZ20-486	SAME AS 3PZ20-4 EXCEPT "D" STOCK SIZE AND Y	.196	.8750	.130	—	—	—	.423	.122	.116
10	3PZ20-603	SAME AS 3PZ20-4 EXCEPT "D" STOCK SIZE ANDY	.196	.6250	.130	—	—	—	.385	.122	.116
1/4	3PZ30-127	REFER TO DETAIL A, SH.2, FOR M,N,U,DIMENSIONS	.260	.8750	.150	.027	.445	.351	.507	.136	.130
5/16	3PZ40-24	SAME AS 3PZ40-4 EXCEPT NO 30° CHAMFER, AND STOCK SIZE	.357	1.2500	.210	—	—	—	1.125	.193	.187
5/16	3PZ40-124	REFER TO DETAIL A, SH.2, FOR M,N,U,DIMENSIONS	.334	1.0000	.189	.042	.562	.417	.625	.170	.164
M8	3PZ40-323	IFI502+513 1982	.345	1.0000	.199	—	—	—	.681	.181	.175

REVISION	
PZCN-76	3-30-66
PZCN-99	8-17-67
PZCN-114	5-23-69
PZCN-133	6-30-70
PZCN-139	4/26/74
PZCN-172	7-21-76
PZCN-180	9-15-77
ECO-14	3-17-80
ECO-60	3/10/87
ECO-74	8/16/91
ECO-153	7-25-13

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TITLE:

POZIDRIV® SPECIAL FLAT HEAD PUNCHES

DRAWN L.A. PROULX	DATE 2-7-66	DRAWING NUMBER **PPZ-9**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 2

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

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"PEN" MEASURED FROM FACE OF BUTTON ON PUNCH

SPIN-LOCK CSK. HEADS

DETAIL A

FLAT TOP PAN (CHEESE) HEAD

DETAIL B

PPZ-9 SHEET 2 OF 2

REVISION		
	PZCN-179 9-12-77	ECO-14 3-17-80

D ±.0005	K +.001 –.000	L +.000 –.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

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RECESS SIZE	B	+00' –.07' E	F	+.002 –.000 G	+15' –00' H	P	R
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5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

NOTES:

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PUNCH DETAIL	PUNCH NO.	+.006 –.000 A	±.0005 D	REF J	+.002 –.000 M	+.005 –.000 N	+.005 –.000 O	+.005 –.000 Q	RAD S	+.002 –.000 T	+.005 –.000 U	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
ELECTRICAL BINDING HEAD	3PZ20–143	.191	.5625	.135	.063	.416	.453	–	–	–	–	.115	.109
WASHER HEAD	3PZ20–156	.171	.5625	.123	.075	.305	.193	–	.032	–	–	.090	.084
SHEET 2, DET. C	3PZ20–165	.160	.5625	.101	.080	.340	.625	.247	.067	.063	–	.082	.076
SHEET 2, DET. C	3PZ20–168	.162	.5625	.101	.080	.383	.625	.287	.064	.063	–	.085	.079
SHAVED FILLISTER HEAD	3PZ20–346	.135	.4375	.082	.053	.264	.191	–	–	–	–	.057	.061
SPECIAL THIN WASHER HEAD	3PZ20–387	.151	.4375	.102	.050	.259	.193	–	–	–	–	.073	.067
SPECIAL RD HEAD TYPE Z TAPPING	3PZ20–562	.162	.5625	.119	.059	.242	.154	–	–	–	–	.083	.077
SPECIAL BINDING HEAD	3PZ20–575	.191	.5625	.135	.074	.497	.453	–	–	–	–	.115	.109
SHEET 2 DET. D	3PZ40–283	.357	1.2500	.228	.070	.613	1.000	–	.050	–	–	.191	.185
SHEET 2, DET. B	3PZ40–280	.386	1.5000	.239	.176	1.250	1.198	–		–	–	.223	.217
SHEET 2, DET. C	3PZ30–119	.248	.8750	.146	.127	.565	1.000	.443	.105	.105		.121	.115
TRUSS HEAD	3PZ30–140	.304	1.0000	.220	.156	.698	.468	–	–	–	–	.176	.170
SHEET 2, DET. A	3PZ40–177	.323	1.0000	.212	.053	.562	.379	.388		.036	.438	.151	.145
SHEET 2, DET. B	3PZ40–250	.367	1.2500	.222	.121	1.015	1.085	–	–	–	–	.203	.197
————	3PZ40–271	.392	1.2500	.285	.096	.607	.527	–	–	–	–	.223	.217
TRUSS HEAD	3PZ40–272	.380	1.2500	.265	.187	.890	.623	–	–	–	–	.212	.206

ECO–153 7–25–13

ECO–34 AUG 02, 1982

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TITLE:

POZIDRIV® SPECIAL CURVED TOP HEAD PUNCHES

DRAWN: R.H. SOMERS	DATE: 02/04/66	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11–7–11	**PPZ-10** SHEET 1 OF 8

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

SPIN-LOCK OVAL CSK. HEAD PUNCH

DETAIL A

SPEC. FLAT TOP TRUSS HEAD PUNCH

DETAIL B

SPIN-LOCK TRUSS & PAN HEAD PUNCH

DETAIL C

SPECIAL DOUBLE RADIUS PUNCH

DETAIL D

ECO−34
AUG 02, 1982

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TITLE:

POZIDRIV® SPECIAL CURVED TOP HEAD PUNCHES

DRAWN: R.H. SOMERS	DATE: 02/04/66	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11−7−11	**PPZ-10** SHEET 2 OF 8

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DETAIL E

DETAIL F

DETAIL G

DETAIL H

ECO-34
AUG 02, 1982

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TITLE: **POZIDRIV® SPECIAL CURVED TOP HEAD PUNCHES**

DRAWN: R.H. SOMERS	DATE: 02/04/66	DRAWING NUMBER **PPZ-10**
CONFIRMED: L. DOUGAN	DATE: 11-7-11	SHEET 3 OF 8

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

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SLOT ONLY

SCREW SIZE	SLOT ± .001 WIDTH	DEPTH
4	.035	.045
6	.044	.056

DETAIL I

COIN SLOT ONLY

DETAIL J

DETAIL K

COIN SLOT ONLY

DETAIL L

ECO–34
AUG 02, 1982

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TITLE:

POZIDRIV® SPECIAL CURVED TOP HEAD PUNCHES

DRAWN: R.H. SOMERS	DATE: 02/04/66	DRAWING NUMBER **PPZ-10**
CONFIRMED: L. DOUGAN	DATE: 11–7–11	SHEET 4 OF 8

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

DETAIL M

ECO-34
AUG 02, 1982

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TITLE: **POZIDRIV® SPECIAL CURVED TOP HEAD PUNCHES**

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CONFIRMED: L. DOUGAN	DATE: 11-7-11	SHEET 5 OF 8

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PUNCH DETAIL	PUNCH NO.	+.006 −.000 A	±.0005 D	REF J	+.002 −.000 M	+.005 −.000 N	−.005 −.000 O	+.005 −.000 Q	REF S	+.002 −.000 T	+.005 −.000 U	PUNCH PENETRATION MAX	MIN
COMBINATION PAN HEAD DETAIL L−M2X.4	3PZ00−26	.083	.4375	.066	.037	.158	.132	−	.030	−	−	.056	.051
SHEET 4, DETAILS I	3PZ10−171	.123	.4375	.087	.049	.230	.128	−	.143	−	−	.083	.078
FOR 2.9 AND 3MM 90° OVAL HEAD PER I.F.I RED BOOK	3PZ10−172	.123	.4375	.095	.026	.256	.328	−		−	−	.082	.077
SHEET 1	3PZ10−8	.108	.4375	.084	.037	.176	.124	−		−	−	.053	.048
SHEET 2 DET D (3PZ10−13)	3PZ10−187	.096	.4375	.068	.041	.160	.132		.030			.053	.048
SHEET 2 DET D (3PZ10−15)	3PZ10−186	.114	.4375	.085	.057	.215	.197		.040			.072	.066
ELECTRICAL BINDING HEAD	3PZ20−144	.136	.8625	.078	.035	.278	.298	−	−	−	−	.058	.052
SHEET 1 CHRYS. 6027413	3PZ20−195	.150	.4375	.101	.048	.246	.152	−	−	−	−	.072	.068
FISHER 4408400 9728350	3PZ20−223	.166	.8750	.109	.042	.360	.404	−	−	−	−	.090	.084
SHEET 3, DETAIL G	3PZ20−499	.171	.8750	.122	.070	.447	.242	−	−	−	−	.093	.087
SHEET 3, DETAIL E	3PZ20−550	.146	.5625	.095	.078	.360	.191	.240	−	.025	.280	.068	.062
SHEET 3, DETAIL H	3PZ20−599	.171	.8750	.105	.057	.437	.242	−	.187	−	−	.096	.090
SHEET 3, DETAIL F	3PZ20−636	.161	.5625	.112	.061	.370	.203	.250		.043	.018	.083	.077
SHEET 3, DETAIL F	3PZ20−637	.175	.7500	.109	.035	.362	.340	−	−	−	−	.100	.094
SHEET 4, DETAIL I	3PZ20−638	.169	.4375	.103	.062	.280	.153	−	.189	−	−	.094	.088
SHEET 3 DETAIL G FISHER 20007317	3PZ20−639	.171	.8750	.122	.070	.408	.242	−	−	−	−	.093	.087
SHEET 1 SAGINAW 7808587	3PZ20−640	.169	.5625	.118	.086	.372	.244	−	−	−	−	.092	.086
SHEET 2 DETAIL D FISHER 75CP04785−22	3PZ20−641	.154	.5625	.103	.061	.256	.207	−	.047	−	−	.076	.070
SHEET 4, DETAIL J	3PZ20−642	.177	.5625	.121	.095	.320	.413	−	−	−	−	.101	.095
FISHER 20016079	3PZ20−643	.184	.8750	.123	.056	.695	.984	−	−	−	−	.109	.103
AMC 4004403 DETAIL K	3PZ20−645	.140	.5625	.074	.047	.250	.140	−	.174	−	−	.065	.059
DETAIL K FISHER 20006694	3PZ20−646	.166	.5625	.100	.056	.281	.151	−	.204	−	−	.091	.085
M,N,O OF 3PZ30−67 AND 'A' OF 3PZ20−258	3PZ20−647	.185	.8750	.131	.059	.402	.373	−	−	−	−	.109	.103
SHEET 3 DETAIL G FISHER 20156600	3PZ20−648	.171	.8750	.122	.070	.500	.242	−	−	−	−	.093	.087
REF 3PZ20−642 FISHER 20308342	3PZ20−650	.177	.5625	.121	.031	.312	.413	−	−	−	−	.101	.095
REF 3PZ20−650 N=.274 O=.318	3PZ20−657	.177	.5625	.121	.031	.274	.318	−	−	−	−	.100	.094
REF 3PZ20−596 OBSOLETE M=.052 Y FLAT=.475	3PZ20−684	.178	.5625	.113	.052	.316	.172	−	−	−	−	.103	.097
REF 3PZ20−596 M=.062 Y FLAT=.475	3PZ20−685	.169	.5625	.104	.052	.316	.172	−	−	−	−	.094	.088
SHEET 4, DETAIL K 2 DOTS FISHER 11505773 180° APART	3PZ21−652	.140	.5625	.074	.043	.215	.102	−	.170	−	−	.065	.059
SHEET 4, DETAIL K 2 DOTS FISHER 20351031 180° APART	3PZ21−653	.205	.8750	.141	.077	.366	.201	−	.244	−	−	.131	.125
SHEET 4, DETAIL K 2 DOTS FISHER 11508257 180° APART	3PZ21−654	.154	.5625	.088	.056	.281	.151	−	.204	−	−	.079	.073
FISHER 20442798 AND 20442799 2 DOTS 180° APART	3PZ21−655	.150	.5625	.095	.029	.242	.269	−	−	−	−	.074	.068
(A) 2 DOTS 180° APART	3PZ21−686	.166	.5625	.100	.055	.332	.210	−	.204	−	−	.091	.085

(A) DETK, FISHER 20367774 AND CPC 10184284

ECO−66 MAY 31, 1990
ECO−46 MAY 29, 1984
ECO−45 APR 18, 1984
ECO−44 APR 11, 1984
ECO−41 NOV 02, 1983
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TITLE:

POZIDRIV® SPECIAL CURVED TOP HEAD PUNCHES

DRAWN: R.H. SOMERS	DATE: 02/04/66	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11−7−11	**PPZ-10** SHEET 6 OF 8

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774−396−6190 FAX: 508−966−2326

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PUNCH DETAIL	PUNCH NO.	+.006 −.000 A	±.0005 D	REF J	+.002 −.000 M	+.005 −.000 N	−.005 −.000 O	+.005 −.000 Q	REF S	+.002 −.000 T	+.005 −.000 U	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
SHEET 2, DETAIL C	3PZ30−116	.229	.8750	.132	.113	.454	.875	.331	.095	.091	–	.097	.091
SHEET 2, DETAIL A	3PZ30−171	.255	.8750	.175	.043	.445	.286	.302	–	.029	.345	.126	.120
FISHER 8771869	3PZ30−272	.241	1.0000	.142	.080	.640	.680	–	–	–	–	.114	.108
METRIC OVAL HEAD FISHER 8736913	3PZ30−276	.245	.8750	.152	.053	.431	.464	–	–	–	–	.118	.112
METRIC OVAL HEAD FISHER 1708768	3PZ30−277	.254	.8750	.166	.090	.485	.373	–	–	–	–	.126	.120
FISHER 200006670	3PZ30−278	.265	.8750	.162	.044	.655	1.241	–	–	–	–	.140	.136
FISHER 20051271	3PZ30−279	.265	1.2500	.165	.128	.932	.910	–	–	–	–	.139	.133
G.M. OVAL HEAD M6.3	3PZ30−280	.275	.8750	.186	.055	.524	.652	–	–	–	–	.148	.142
FISHER 20375022 PFD	3PZ30−283	.291	.8750	.192	.029	.482	1.016	–	–	–	–	.165	.159
FISHER 20443591	3PZ30−284	.288	.8750	.208	.121	.542	.364	–	–	–	–	.160	.154
FISHER 20451450 AND	3PZ30−285	.265	.8750	.155	.076	.366	.185	–	.305	–	–	.141	.135
20451873 DETAIL K	———	–	–	–	–	–	–	–	–	–	–	–	–
	3PZ30−27	.258	.8750	.167	.078	.510	.456	–	–	–	–	.131	.125
REF 3PZ 1−653 FISHER 20351031 2 DOTS 180° APART	3PZ31−282	.226	.8750	.076	.090	.359	.218	–	.267	–	–	.101	.095
SPECIAL	3PZ40−274	.323	1.0000	.212	.079	462	.379	–	–	–	–	.151	.145
SHEET 1	3PZ40−286	.325	1.2500	.200	.119	.760	.666	–	–	–	–	.158	.152
SHEET 1	3PZ40−287	.325	1.2500	.192	.119	1.010	1.131	–	–	–	–	.159	.153
SHEET 2, DETAIL B CHRYSLER 6027972	3PZ40−293	.325	1.2500	.178	.113	.760	.541	–	–	–	–	.161	.155
SHEET 1	3PZ40−297	.325	1.2500	.205	.120	.750	.647	–	–	–	–	.157	.151
SHEET 2, DETAIL B FORD ED 385283	3PZ40−301	.414	1.5000	.268	.199	1.260	.960	–	–	–	–	.251	.245
FULL CONTOUR TRUSS HEAD CHRYSLER 6031369	3PZ40−302	.382	1.2500	.223	.187	.770	.490	–	–	–	–	.213	.207
FLATTOP PAN HEAD DETAIL M FORD N 8004600	3PZ40−303	.369	1.5000	.225	.120	.800	–	–	–	–	–	.205	.199
FORD N800460	3PZ40−303A	.369	1.5000	.225	.175	.800	–	–	–	–	–	.205	.199
M12 OVAL HEAD	3PZ40−308	.463	1.5000	.346	.133	.962	.936	–	–	–	–	.297	.291
FISHER 20005904	3PZ40−322	.334	1.0000	.199	.055	.790	1.446	–	–	–	–	.168	.162
STD. FULL CONTOUR TRUSS	3PZ40−31	.421	1.5000	.309	.250	1.062	.689	–	–	–	–	.255	.249

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ECO−44 FEB 03, 1984
ECO−38 NOV 02, 1982
ECO−37 NOV 01 1982
ECO−34 AUG 02, 1982

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TITLE:

POZIDRIV® SPECIAL CURVED TOP HEAD PUNCHES

DRAWN: R.H. SOMERS	DATE: 02/04/66	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11−7−11	**PPZ-10** SHEET 7 OF 8

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
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ROUND HEAD MACHINE SCREWS & ALL TAPPING SCREWS

SCREW SIZE	PUNCH NO.	+.006 −.000	±.0005	REF	+.002 −.000	+.005 −.000	+.005 −.000	PUNCH PENETRATION	
		A	D	J	M	N	O	MAX	MIN
2	3PZ10−46	.092	.4375	.068	.035	.144	.091	.047	.042
4	3PZ10−44	.110	.4375	.087	.043	.185	.121	.067	.062
5	3PZ20−30	.142	.4375	.096	.047	.207	.137	.063	.057
6	3PZ20−15	.150	.4375	.104	.051	.229	.154	.071	.065
7	3PZ20−16	.157	.5625	.111	.055	.249	.168	.078	.072
8	3PZ20−17	.164	.5625	.119	.059	.273	.187	.086	.080
10	3PZ20−19	.182	.5625	.135	.068	.317	.219	.105	.099
12	3PZ30−16	.234	.8750	.154	.076	.361	.252	.103	.097
14	3PZ30−17	.246	.8750	.170	.084	.399	.279	.115	.109
1/4	3PZ30−19	.255	.8750	.175	.087	.411	.286	.126	.120
16	3PZ30−18	.265	1.0000	.185	.092	.441	.310	.136	.130
5/16	3PZ30−20	.291	1.0000	.213	.107	.510	.357	.162	.156
3/8	3PZ40−20	.368	1.2500	.264	.126	.608	.430	.195	.189

NOTES:

REFER TO PZFD−6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG−0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE−HALF THE TABULATED VALUES.

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AUG 02, 1982

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TITLE:

POZIDRIV® SPECIAL CURVED TOP HEAD PUNCHES

DRAWN: R.H. SOMERS	DATE: 02/04/66	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 11−7−11	**PPZ-10** SHEET 8 OF 8

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
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CURVED TOP HEADS			FLAT HEADS		
DATE	PUNCH NO.	HEAD MARKING	DATE	PUNCH NO.	HEAD MARKING
4–28–65	3PZ20–8–A	S	5–28–65	3PZ20–1–A	S
2–4–70	3PZ20–12–A	S	6–7–65	3PZ20–2–A	S
10–29–70	3PZ20–21–A	S			
1–24–75	3PZ20–12–B	●●●●	1–27–76	3PZ20–486–A	S
1–24–75	3PZ20–599–A	●●●●	4–16–76	3PZ10–3–A	S
2–4–75	3PZ20–499–A	S	6–7–76	3PZ20–6–A	S
2–4–75	3PZ20–499–B	S●			
8–21–75	3PZ20–13–A	S			
9–2–75	3PZ20–639–A	S	12–21–66	3PZ20–135–A	PIC 239–3A
9–21–76	3PZ20–639B	S●	12–21–66	3PZ20–136–A	PIC 239–4A
9–21–76	3PZ20–387A	S●	5–9–67	3PZ20–135–B	PIC 239–3 0
11–29–76	3PZ20–592A	S	5–9–67	3PZ20–136–B	PIC 239–4 0
12–9–76	2PZ20–23A	S	5–9–67	3PZ20–136–C	PIC 1203 0
3–20–78	3PZ21–8–B	S	6–3–68	3PZ30–93–C	PIC 1204 0
			5–9–67	3PZ30–93–A	PIC 239–5 0
			5–9–67	3PZ30–93–B	PIC 334 0
1–20–75	3PZ30–277–A	S	2–25–66	3PZ40–2–A	–10
			3–30–66	3PZ40–2–B	–12
			6–22–67	3PZ40–2–C	–14
			9–12–77	3PZ30–127–A	● ● ● ●
			5–9–67	3PZ40–79–A	PIC 335 0
11–4–66	3PZ10–6–A	S			
12–9–76	1Z–32A	S			

REFER TO BASIC PUNCH FOR DIMENSIONAL DATA
EXAMPLE: 3PZ20–8–A #6 OVAL HEAD WITH S ON HEAD
3PZ20–8 #6 OVAL HEAD

REVISION PZCN–185 3–20–78

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POZIDRIV® PUNCHES WITH HEAD MARKINGS

DRAWN L. WHITE	DATE 4–28–65	DRAWING NUMBER **PPZ-10A**
CONFIRMED: L. DOUGAN	DATE 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
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D ±.0005	K +.001 −.000	L +.000 −.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' −07' E	F	+.002 −.000 G	+15' −00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

82° FLUSH HEAD AIRCRAFT MACHINE SCREWS

SCREW SIZE	PUNCH NO.	+.006 −.000 A	±.0005 D	REF J	MIN. FACE DIA Y	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00-4	.061	.4375	.037	.119	.037	.032
1	3PZ00-5	.069	.4375	.045	.146	.045	.040
2	3PZ10-1	.094	.4375	.057	.199	.053	.048
3	3PZ10-2	.099	.4375	.062	.199	.058	.053
4	3PZ10-3	.120	.4375	.083	.252	.079	.074
5	3PZ20-1	.146	.4375	.080	.305	.071	.065
6	3PZ20-2	.166	.4375	.100	.332	.091	.085
8	3PZ20-3	.181	.5625	.115	.385	.107	.101
10	3PZ20-4	.196	.5625	.130	.385	.122	.116
1/4	3PZ30-3	.275	.8750	.165	.507	.151	.145
5/16	3PZ40-4	.357	1.0000	.210	.762	.193	.187
3/8	3PZ40-2	.385	1.2500	.240	.812	.222	.216
7/16	3PZ40-5	.401	1.2500	.255	.875	.238	.232
1/2	3PZ40-3	.416	1.2500	.271	.875	.253	.247
9/16	3PZ40-141	.439	1.5000	.294	1.000	.276	.270
5/8	3PZ50-3	.564	2.0000	.336	1.625	.307	.300
3/4	3PZ50-4	.628	2.0000	.400	1.500	.372	.365

REVISION	
PZCN-89	2-6-67
PZCN-114	5-23-68
ECO-153	7-25-13

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TITLE:

POZIDRIV®
AIRCRAFT 82° FLUSH HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
L.A. PROULX	4-21-65	**PPZ-11**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 −.000	L +.000 −.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000		
1.2500		
1.5000		
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' −07' E	F	+.002 −.000 G	+15' −00' H	P	R
0	.0300 .0285	46° 00′	.0190 .0180	.032	7° 00′	.012 .008	.004 .003
1	.0500 .0480	46° 00′	.0290 .0280	.050	7° 00′	.012 .006	.005 .003
2	.0720 .0700	46° 00′	.0405 .0395	.090	5° 45′	.015 .009	.006 .003
3	.1070 .1050	56° 15′	.0560 .0550	.150	5° 45′	.020 .014	.010 .005
4	.1560 .1540	56° 15′	.0850 .0840	.198	7° 00′	.025 .019	.015 .008
5	.2460 .2440	56° 15′	.0960 .0950	.311	7° 00′	.030 .024	.035 .025

100° FLUSH HEAD AIRCRAFT & CLOSE TOLERANCE MACHINE SCREW

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

SCREW SIZE	PUNCH NO.	+.006 −.000 A	±.0005 D	REF J	MIN. FACE DIA Y	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00-19	.053	.4375	.029	.119	.029	.024
1	3PZ00-4	.061	.4375	.037	.119	.037	.032
2	3PZ10-80	.087	.4375	.050	.172	.046	.041
3	3PZ10-1	.094	.4375	.057	.199	.053	.048
4	3PZ10-54	.109	.4375	.072	.225	.068	.063
5	3PZ20-123	.136	.4375	.070	.312	.061	.055
6	3PZ20-1	.146	.4375	.080	.305	.071	.065
8	3PZ20-135	.161	.5625	.095	.375	.086	.080
10	3PZ20-136	.176	.5625	.110	.438	.101	.095
1/4	3PZ30-93	.239	.8750	.129	.594	.115	.109
5/16	3PZ40-260/79	.309	.8750/1.0000	.162	.750	.145	.139
3/8	3PZ40-106	.334	1.0000	.187	.844	.170	.164
7/16	3PZ40-210	.358	1.2500	.212	.938	.194	.186
1/2	3PZ40-2	.385	1.2500	.240	.812	.222	.216
9/16	3PZ40-3	.416	1.2500	.271	.875	.253	.247
5/8	3PZ50-11	.503	2.0000	.275	1.375	.245	.239

REVISION		
PZCN-89	4-13-67	
PZCN-114	5-23-68	
ECO-153	7-25-13	

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TITLE:

POZIDRIV® AIRCRAFT & CLOSE TOLERANCE 100° FLUSH HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
R.H. SOMERS	3-3-65	**PPZ-12**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 −.000	L +.000 −.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' −07' E	F	+.002 −.000 G	+15' −00' H	P	R
0	.0300 .0285	46° 00′	.0190 .0180	.032	7° 00′	.012 .008	.004 .003
1	.0500 .0480	46° 00′	.0290 .0280	.050	7° 00′	.012 .006	.005 .003
2	.0720 .0700	46° 00′	.0405 .0395	.090	5° 45′	.015 .009	.006 .003
3	.1070 .1050	56° 15′	.0560 .0550	.150	5° 45′	.020 .014	.010 .005
4	.1560 .1540	56° 15′	.0850 .0840	.198	7° 00′	.025 .019	.015 .008
5	.2460 .2440	56° 15′	.0960 .0950	.311	7° 00′	.030 .024	.035 .025

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

FLAT FILLISTER HEAD AIRCRAFT MACHINE SCREWS

SCREW SIZE	PUNCH NO.	+.006 −.000 A	±.0005 D	REF J	MIN. FACE DIA Y	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00−4	.061	.4375	.037	.119	.037	.032
1	3PZ00−5	.069	.4375	.045	.146	.045	.040
2	3PZ10−1	.094	.4375	.057	.199	.053	.048
3	3PZ10−2	.099	.4375	.062	.199	.058	.053
4	3PZ10−54	.109	.4375	.072	.225	.068	.063
5	3PZ20−1	.146	.4375	.080	.305	.071	.065
6	3PZ20−134	.156	.4375	.090	.305	.081	.075
8	3PZ20−2	.166	.4375	.100	.332	.091	.085
10	3PZ20−3	.181	.5625	.115	.385	.107	.101
1/4	3PZ30−2	.260	.8750	.150	.544	.136	.130
5/16	3PZ40−64	.327	1.0000	.180	.650	.163	.157
3/8	3PZ40−4	.357	1.0000	.210	.762	.193	.187
7/16	3PZ40−2	.385	1.2500	.240	.812	.222	.216
1/2	3PZ40−5	.401	1.2500	.255	.875	.238	.232

REVISION	
PZCN−89	4−13−67
PZCN−114	5−23−68
ECO−153	7−25−13

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TITLE:

POZIDRIV ®
AIRCRAFT FLAT FILLISTER HEAD PUNCHES

DRAWN R.H. SOMERS	DATE 3−5−65	DRAWING NUMBER **PPZ-13**
CONFIRMED: L. DOUGAN	DATE 11−7−11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774−396−6190 FAX: 508−966−2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 –.000	L +.000 –.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' –.07' E	F	+.002 –.000 G	+15' –00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

NOTES:

REFER TO PZFD–6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG–0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE–HALF THE TABULATED VALUES.

BRAZIER HEAD AIRCRAFT MACHINE SCREWS

SCREW SIZE	PUNCH NO.	+.006 –.000 A	±.0005 D	REF J	+.002 –.000 M	+.005 –.000 N	+.005 –.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
6	3PZ20–125	.143	.5625	.090	.064	.286	.196	.065	.059
8	3PZ20–126	.155	.5625	.103	.073	.341	.230	.078	.072
10	3PZ20–127	.168	.5625	.116	.091	.394	.264	.091	.085
1/4	3PZ30–88	.240	.8750	.153	.121	.501	.320	.111	.105
5/16	3PZ40–97	.313	1.0000	.201	.088	.493	.390	.142	.136
3/8	3PZ40–98	.342	1.2500	.230	.101	.578	.460	.173	.167
7/16	3PZ40–99	.368	1.2500	.256	.116	.654	.530	.200	.194
1/2	3PZ40–100	.392	1.3750	.280	.132	.754	.600	.224	.218

REVISION	
PZCN–89	4–13–67
PZCN–114	5–23–68
ECO–153	7–25–13

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TITLE: **POZIDRIV® AIRCRAFT BRAZIER HEAD PUNCHES**

DRAWN L.A. PROULX	DATE 3–8–65	DRAWING NUMBER **PPZ-14**
CONFIRMED: L. DOUGAN	DATE 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 -.000	L +.000 -.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' -.07' E	F	+.002 -.000 G	+15' -00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

PAN HEAD AIRCRAFT MACHINE SCREWS

SCREW SIZE	PUNCH NO.	+.006 -.000 A	±.0005 D	REF J	+.002 -.000 M	+.005 -.000 N	+.005 -.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00-14	.059	.4375	.040	.028	.131	.091	.033	.028
1	3PZ00-15	.066	.4375	.046	.034	.160	.111	.040	.035
2	3PZ10-13	.096	.4375	.068	.040	.190	.132	.053	.048
3	3PZ10-14	.104	.4375	.077	.045	.215	.150	.062	.057
4	3PZ10-15	.114	.4375	.087	.049	.241	.173	.072	.067
5	3PZ20-20	.146	.4375	.095	.053	.264	.191	.068	.062
6	2PZ20-21	.154	.4375	.103	.055	.280	.207	.076	.070
8	3PZ20-23	.169	.5625	.118	.072	.346	.244	.092	.086
10	3PZ20-25	.185	.5625	.135	.087	.409	.284	.108	.102
1/4	3PZ30-22	.265	.8750	.180	.105	,519	.373	.137	.131
5/16	3PZ40-9	.333	1.0000	.213	.118	.665	.527	.164	.158
3/8	3PZ40-26	.369	1.2500	.250	.133	.788	.652	.201	.195
7/16	3PZ40-27	.391	1.2500	.271	.147	.913	.782	.225	.219
1/2	3PZ40-28	.412	1.5000	.290	.162	1.038	.917	.246	.240

REVISION		
PZCN-89	4-13-67	
PZCN-114	5-23-68	
ECO-153	7-25-13	

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TITLE: **POZIDRIV® AIRCRAFT PAN HEAD PUNCHES**

DRAWN R.H. SOMERS	DATE 2-5-65	DRAWING NUMBER **PPZ-15**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 −.000	L +.000 −.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' −07' E	F	+.002 −.000 G	+15' −00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

SCREW SIZE	PUNCH NO.	+.006 −.000 A	±.0005 D	REF J	+.002 −.000 M	+.005 −.000 N	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
4	3PZ10-41	.095	.4375	.058	.008	.153	.063	.057
5	3PZ10-42	.103	.4375	.067	.008	.153	.071	.066
6	3PZ20-100	,142	.4375	.076	.012	.210	.080	.074
8	3PZ20-102	.161	.5625	.095	.018	.210	.105	.099
10	3PZ20-103	.170	.5625	.104	.020	.270	.116	.110
12	3PZ30-59	.238	.8750	.128	.026	.270	.140	.134
14 1/4	3PZ30-71	.267	.8750	.157	.030	.320	.174	.168
1/4 7/16HEX	3PZ30-87	.267	.8750	.157	.030	.381	.174	.168
20 5/16	3PZ40-242	.345	1.0000	.200	.036	.432	.219	.213
24 3/8	3PZ40-243	.372	1.0000	.227	.040	.491	.249	.243
5/16	3PZ40-284	.309	1.0000	.162	.024	.432	.172	.166

REVISION	
PZCN-109	12-7-67
PZCN-114	5-23-68
PZCN-133	6-30-70
ECO-153	7-25-13

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TITLE:

POZIDRIV®
INDENTED HEXAGON HEAD PUNCHES

DRAWN R.H. SOMERS	DATE 3-7-66	DRAWING NUMBER **PPZ-16**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

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D ±.0005	K +.001 −.000	L +.000 −.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' −07' E	F	+.002 −.000 G	+15' −00' H	P	R
0	.0300 .0285	46° 00′	.0190 .0180	.032	7° 00′	.012 .008	.004 .003
1	.0500 .0480	46° 00′	.0290 .0280	.050	7° 00′	.012 .006	.005 .003
2	.0720 .0700	46° 00′	.0405 .0395	.090	5° 45′	.015 .009	.006 .003
3	.1070 .1050	56° 15′	.0560 .0550	.150	5° 45′	.020 .014	.010 .005
4	.1560 .1540	56° 15′	.0850 .0840	.198	7° 00′	.025 .019	.015 .008
5	.2460 .2440	56° 15′	.0960 .0950	.311	7° 00′	.030 .024	.035 .025

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	+.006 −.000 A	±.0005 D	−.000 J	+.002 −.000 M	+.005 −.000 N	+.005 −.000 S	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
4	3PZ10-157	.116	.4375	.079	.014	.236	.188	.075	.070
6	3PZ20-137	.137	.4375	.071	.029	.330	.230	.062	.056
8	3PZ20-474	.175	.5625	.109	.029	.330	.230	.100	.094
10	3PZ20-147	.189	.5625	.124	.035	.410	.290	.115	.109
12	3PZ30-94	.251	.8750	.142	.035	.410	.290	.127	.121
14 1/4	3PZ30-58	.265	1.0000	.157	.041	.491	.347	.141	.135
20 5/16	3PZ40-65	.345	1.0000	.200	.052	.639	.460	.181	.175
24 3/8	3PZ40-66	.370	1.2500	.227	.064	.738	.518	.206	.200
14 & 1/4 7/16 HEX	3PZ30-256	.265	1.0000	.157	.051	.580	.403	.141	.135

REVISION	
ECO-153	7-25-13
PZCN-133	6-30-70
PZCN-114	5-23-68
PZCN-98	8-16-67

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TITLE:

POZIDRIV®
TRIMMED HEXAGON HEAD PUNCHES

DRAWN R.H. SOMERS	DATE 3-4-66	DRAWING NUMBER **PPZ-17**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 −.000	L +.000 −.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' −.07' E	F	+.002 −.000 G	+15' −00' H	P	R
0	.0300 .0285	46° 00′	.0190 .0180	.032	7° 00′	.012 .008	.004 .003
1	.0500 .0480	46° 00′	.0290 .0280	.050	7° 00′	.012 .006	.005 .003
2	.0720 .0700	46° 00′	.0405 .0395	.090	5° 45′	.015 .009	.006 .003
3	.1070 .1050	56° 15′	.0560 .0550	.150	5° 45′	.020 .014	.010 .005
4	.1560 .1540	56° 15′	.0850 .0840	.198	7° 00′	.025 .019	.015 .008
5	.2460 .2440	56° 15′	.0960 .0950	.311	7° 00′	.030 .024	.035 .025

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	+.006 −.000 A	±.0005 D	REF J	+.002 −.000 M	+.005 −.000 N	+.005 −.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
0	3PZ00-1	.067	.4375	.047	.011	.115	.156	.041	.036
1	3PZ00-3	.070	.4375	.050	.013	.139	.190	.045	.040
2	3PZ10-66	.083	.4375	.050	.016	.168	.224	.041	.036
3	3PZ10-86	.092	.4375	.060	.018	.188	.258	.050	.045
4	3PZ10-119	.102	.4375	.070	.020	.209	.291	.060	.055
6	3PZ20-194	.139	.4375	.080	.023	.251	.359	.063	.057
8	3PZ20-392	.147	.5625	.088	.026	.293	.426	.071	.065
10	3PZ20-197	.174	.5625	.116	.031	.347	.494	.098	.092
1/4	3PZ30-109	.228	.8750	.128	.050	.500	.650	.102	.096
5/16	3PZ30-246	.278	.8750	.180	.052	.560	.812	.152	.146
3/8	3PZ40-273	.311	1.0000	.178	.058	.665	.975	.144	.138

REVISION

ECO-153	7-25-13
PZCN-114	5-23-68

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TITLE:

POZIDRIV ®
E. K. MINIATURE PAN HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
L.A. PROULX	2-17-67	**PPZ-18**
CONFIRMED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

SCREW SIZE	PUNCH NO.	+.006 −.000 ØA	±.001 C	±.0005 ØD	+.006 −.000 ØE	+.003 −.000 F	REF J	±.001 ØK	L	+.003 −.000 M	+.006 −.000 ØO	+.000 −.006 RAD P	+.000 −.001 Q	±.003 ØR	±.001 S	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
6 1/4 HEX	3RPZ20−100	.142	.246	.552	.322	.750	.076	.312	STD LENGTH TO 2.50 MAX	.017	.208	.015	.242	.315	.016	.085	.079
8 1/4 HEX	3RPZ20−102	.161					.095							.335	.017	.104	.098
10 5/16 HEX	3RPZ20−103	.170	.306		.447		.104	.375		.027	.258		.302	.400	.017	.123	.117
1/4 3/8 HEX	3RPZ30−71	.267	.369	.990	.510	1.000	.157	.500		.034	.314	.020	.364	.500	.028	.178	.172
1/4 7/16 HEX	3RPZ30−87		.430							.037	.360		.425	–	–	.181	.175
M4 x.7 7 HEX	3RPZ20−650	.161	.269	.552	.322	.750	.095	.312		.017	.227	.015	.265	.349	.017	.104	.098
M5 x.8 8 HEX	3RPZ20−651	.174	.309	.7405	.447	.750	.108	.375		.027	.258	.015	.305	.400	.017	.127	.121
M6 x1.0 10 HEX	3RPZ30−281	.240	.387	.990	.510	1.000	.130	.500		.035	.327	.020	.393	.500	.028	.151	.145
M4,8 5.5 HEX	3RPZ20−656	.131	.215	.552	.322	.750	.064	.312		.027	.173	.015	.212	.380	.017	.084	.078

NOTE: (1) PUNCH PENETRATION VALUES INCLUDE MEAN "M" DIMENSION.
(2) REFER TO PUNCH TABULATION OF DRAWING PZFD−6A FOR BASIC POZIDRIV CONFIGURATION DIMENSIONS NOT SHOWN.
(3) IDENTIFICATION GROOVE SHALL BE PER DRAWING PPZ−100 UNLESS OTHERWISE SPECIFIED.

REVISION
ECO−15−11−80: REDRAW: ECO−35, 9/3/82
ECO# 125 02−04−97

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POZIDRIV® HEX WASHER HEAD PUNCH DETAILS

DRAWN R. GUARINO	DATE	DRAWING NUMBER **PPZ-19**
CONFIRMED: L. DOUGAN	DATE 11−7−11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774−396−6190 FAX: 508−966−2326

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SCREW SIZE	PUNCH NO.	+.006 −.000	±.001	±.0005	+.005 −.000	+.003 −.000	REF	+.000 −.001		+.003 −.000	+.000 −.005	±.002	+.000 −.001		PUNCH PENETRATION	
		A	C	D	E	F	J	K	L	M	N	O	Q	U	MAX	MIN
8 4.2 MM	3RPZ20−644	.161	.270	.552	.322	.750	.095	.308	2.50 MAX	.016	.413	.237	.266	.015	.104	.098

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POZIDRIV® SPECIAL INDENTED HEX WASHER HEAD PUNCH

DRAWN	DATE	DRAWING NUMBER
C.M.B.	3−4−76	**PPZ-19A**
CONFIRMED: L. DOUGAN	DATE 11−7−11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774−396−6190 FAX: 508−966−2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

SCREW SIZE	PUNCH NO.	+.006 −.000	±.001	±.0005	+.005 −.000	+.003 −.000	REF	+.000 −.001		+.003 −.000	±.002	+.000 −.001		PUNCH PENETRATION	
		A	C	D	E	F	J	K	L	M	O	Q		MAX	MIN
1/4 6.3 MM	3RPZ30−59	.238	.387	.990	.510	1.000	.128	.495	1.500	.030	.355	.384	.020	.144	.138

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POZIDRIV® SPECIAL INDENTED HEX WASHER HEAD PUNCH

DRAWN C.M.B.	DATE 9−14−76	DRAWING NUMBER **PPZ-19B**
CONFIRMED: L. DOUGAN	DATE 11−7−11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774−396−6190 FAX: 508−966−2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 −.000	L +.000 −.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' −07' E	F	+.002 −.000 G	+15' −00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

NOTES:

REFER TO PZFD-6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG-0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE-HALF THE TABULATED VALUES.

MACHINE SCREWS & ALL TAPPING SCREWS EXCEPT TYPE "A"

SCREW SIZE	PUNCH NO.	+.006 −.000 A	±.0005 D	REF J	+.002 −.000 M	+.005 −.000 N	+.005 −.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
2	3PZ10-170	.085	.4375	.057	.031	.157	.115	.042	.037
4	3PZ10-14	.104	.4375	.077	.045	.215	.150	.062	.057
6	3PZ20-20	.146	.4375	.095	.053	.264	.191	.068	.062
7	3PZ20-21	.154	.4375	.103	.055	.280	.207	.076	.070
8	3PZ20-22	.162	.4375	.111	.064	.317	.228	.085	.079
10	3PZ20-632	.176	.5625	.125	.082	.382	.263	.099	.093
12	3PZ30-273	.236	.5625	.150	.091	.434	.305	.107	.101
1/4	3PZ30-22	.265	.5625	.180	.105	.519	.373	.137	.131
5/16	3PZ40-298	.320	1.0000	.201	.113	.638	.506	.152	.146
3/8	3PZ40-299	.333	1.0000	.210	.124	.757	.640	.164	.158

NOTE: PROPOSED ALTERNATE TO FLAT TOP TRUSS HEAD

REVISION	
ECO# 129 8-1-97	
ECO# 153 7-25-13	

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TITLE:

POZIDRIV ® FLANGE HEAD PUNCHES

DRAWN	DATE	DRAWING NUMBER
APC	7/6/70	**PPZ-20**
CHECKED: L. DOUGAN	DATE 11-7-11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774-396-6190 FAX: 508-966-2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 –.000	L +.000 –.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' –07' E	F	+.002 –.000 G	+15' –00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

PUNCH NO.	+.006 –.000 A	±.0005 D	+.002 –.000 G	REF J	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN	MIN FACE øY
3PZ00–5	.069	.4375	.032	.045	.045	.040	.146
3PZ00–28	.084	.4375	.032	.063	.060	.050	.199
3PZ10–1	.094	.4375	.050	.057	.053	.048	.199
3PZ10–2	.099	.4375	.050	.062	.058	.053	.199
3PZ10–3	.120	.4375	.050	.083	.079	.074	.252
3PZ10–54	.109	.4375	.050	.072	.068	.063	.225
3PZ10–80	.087	.4375	.050	.050	.046	.041	.172
3PZ20–1	.146	.4375	.090	.080	.071	.065	.305
3PZ20–2	.166	.4375	.090	.100	.091	.085	.332
3PZ20–4	.196	.5625	.090	.130	.122	.116	.385
3PZ20–486	.196	.8750	.090	.130	.122	.116	.409
3PZ20–6	.174	.5625	.090	.108	.099	.093	.385
3PZ20–134	.156	.4375	.090	.090	.081	.075	.305
3PZ20–135	.161	.5625	.090	.095	.086	.080	.375
3PZ30–1	.250	.5625	.150	.140	.125	.119	.385
3PZ30–11	.250	.8750	.150	.140	.125	.119	.455
3PZ30–2	.260	.8750	.150	.150	.136	.130	.544
3PZ30–3	.275	.8750	.150	.165	.151	.145	.507
3PZ30–85	.240	.8750	.150	.130	.115	.109	.507
3PZ40–1	.370	1.0000	.198	.225	.206	.200	.709
3PZ40–2	.385	1.2500	.198	.240	.222	.216	.812
3PZ40–106	.334	1.0000	.198	.187	.170	.164	.844
3PZ40–323	.345	1.0000	.198	.199	.181	.175	.681

NOTES:

REFER TO PZFD–6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG–0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE–HALF THE TABULATED VALUES.

SIZE (MM)	IFI 502 and 513 –1982	DIN965	DIN7982	DIN7997
1.6	–	3PZ00–5	–	–
2.2+2	3PZ00–28	3PZ10–80	3PZ10–1	–
2.5	3PZ10–54	3PZ10–2	–	3PZ10–54
2.9+3	3PZ10–3	3PZ10–54	3PZ10–54	3PZ10–3
3.5	3PZ20–135	3PZ20–1	3PZ20–134	3PZ20–134
3.9	–	–	3PZ20–2	–
4.2+4	3PZ20–6	3PZ20–134	3PZ20–6	3PZ20–2
4.5	–	–	–	3PZ20–6
4.8+5	3PZ20–486	3PZ20–6	3PZ20–4	3PZ20–4
5.5	3Z11	–	3Z11	3PZ30–85
6.3+6	3PZ30–2	3PZ30–85	3PZ30–3	3Z11
7	–	–	–	3PZ30–3
8	3PZ40–323	3PZ40–106	–	3PZ40–106
9.5+10	3PZ40–2	3PZ40–1	–	–

REVISION ECO–153 7–25–13

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TITLE:

POZIDRIV® METRIC FLAT COUNTERSUNK HEAD PUNCHES IFI AND DIN STANDARDS

DRAWN: J. GRADY	DATE: 08/28/92	DRAWING NUMBER
CHECKED: J. GRADY	DATE: 09/17/92	**PPZ-29** SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

D ±.0005	K +.001 –.000	L +.000 –.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' –07' E	F	+.002 –.000 G	+15' –00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

NOTES:

REFER TO PZFD–6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG–0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE–HALF THE TABULATED VALUES.

PUNCH NO.	+.006 –.000 A	±.0005 D	+.002 –.000 G	REF J	+.002 –.000 M	+.005 –.000 N	+.005 –.000 O	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
3PZ00–30	.071	.4375	.032	.053	.014	.113	.118	.045	.040
3PZ00–27	.093	.4375	.032	.075	.019	.168	.197	.068	.063
3PZ10–190	.101	.4375	.050	.069	.023	.212	.260	.059	.054
3PZ10–191	.116	.4375	.050	.085	.027	.243	.291	.075	.070
3PZ10–192	.095	.4375	.050	.066	.018	.145	.157	.053	.048
3PZ10–193	.111	.4375	.050	.082	.022	.180	.197	.069	.064
3PZ10–194	.124	.4375	.050	.096	.026	.215	.236	.082	.077
3PZ10–195	.095	.4375	.050	.066	.024	.164	.150	.053	.048
3PZ10–196	.124	.4375	.050	.098	.034	.212	.181	.082	.077
3PZ20–688	.174	.4375	.090	.117	.031	.318	.429	.098	.092
3PZ20–689	.191	.5625	.090	.135	.038	.365	.457	.115	.109
3PZ20–690	.218	.5625	.090	.165	.046	.404	.469	.142	.136
3PZ20–691	.171	.4375	.090	.119	.030	.251	.276	.094	.088
3PZ20–692	.183	.5625	.090	.131	.035	.290	.315	.107	.101
3PZ20–693	.200	.5625	.090	.149	.039	.322	.354	.124	.118
3PZ20–694	.208	.5625	.090	.156	.043	.357	.394	.132	.126
3PZ20–695	.170	.4375	.090	.122	.045	.263	.213	.092	.086
3PZ20–696	.174	.5625	.090	.125	.050	.290	.236	.097	.091
3PZ20–697	.184	.5625	.090	.135	.053	.314	.260	.107	.101
3PZ20–698	.200	.5625	.090	.150	.058	.369	.323	.124	.118
3PZ30–306	.261	.8750	.150	.171	.048	.397	.433	.133	.127
3PZ30–307	.275	.8750	.150	.186	.051	.428	.472	.148	.142
3PZ30–308	.316	1.0000	.150	.229	.057	.487	.551	.189	.183
3PZ30–309	.273	.8750	.150	.181	.050	.448	.528	.146	.140
3PZ30–310	.285	.8750	.150	.193	.054	.491	.587	.159	.153
3PZ30–311	.261	.8750	.150	.175	.065	.420	.370	.133	.127
3PZ30–312	.279	.8750	.150	.192	.073	.483	.437	.152	.146
3PZ40–324	.388	1.0000	.198	.268	.077	.676	.776	.221	.215
3PZ40–325	.438	1.2500	.198	.320	.089	.782	.902	.272	.266
3PZ40–326	.346	1.0000	.198	.225	.067	.566	.630	.178	.172
3PZ40–327	.393	1.2500	.198	.273	.083	.704	.787	.226	.220

SIZE (MM)	IFI 502 and 513 –1982	DIN966	DIN7983	DIN7995
1.6	–	3PZ00–30	–	–
2.2+2	3PZ00–27	3PZ10–192	3PZ10–195	3PZ10–192
2.5	3PZ10–190	3PZ10–193	–	3PZ10–193
2.9+3	3PZ10–191	3PZ10–194	3PZ10–196	3PZ10–194
3.5	3PZ20–688	3PZ20–691	3PZ20–695	3PZ20–691
3.9	–	–	3PZ20–696	–
4.2+4	3PZ20–689	3PZ20–692	3PZ20–697	3PZ20–692
4.5	–	–	–	3PZ20–693
4.8+5	3PZ20–690	3PZ20–694	3PZ20–698	3PZ20–694
5.5	3PZ30–309	–	3PZ30–311	3PZ30–306
6.3+6	3PZ30–310	3PZ30–307	3PZ30–312	3PZ30–307
7	–	–	–	3PZ30–308
8	3PZ40–324	3PZ40–326	–	3PZ40–326
9.5+10	3PZ40–325	3PZ40–327	–	–

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TITLE: **POZIDRIV® METRIC OVAL (RAISED COUNTERSUNK) HEAD PUNCHES IFI AND DIN STANDARDS**

DRAWN: J. GRADY	DATE: 08/28/92	DRAWING NUMBER **PPZ-30**
CHECKED: J. GRADY	DATE: 09/17/92	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

REFER TO PRINT PPZ–100 FOR DIMENSIONS

D ±.0005	K +.001 –.000	L +.000 –.001
.4375	.125	.062
.5625	.212	.106
.8750	↓	↓
1.0000	↓	↓
1.2500	↓	↓
1.5000	↓	↓
2.0000	NO PIN SLOT	

THE FOLLOWING DIMENSIONS ARE CONSTANT WITHIN A RECESS SIZE

RECESS SIZE	B	+00' –07' E	F	+.002 –.000 G	+15' –00' H	P	R
0	.0300 .0285	46° 00'	.0190 .0180	.032	7° 00'	.012 .008	.004 .003
1	.0500 .0480	46° 00'	.0290 .0280	.050	7° 00'	.012 .006	.005 .003
2	.0720 .0700	46° 00'	.0405 .0395	.090	5° 45'	.015 .009	.006 .003
3	.1070 .1050	56° 15'	.0560 .0550	.150	5° 45'	.020 .014	.010 .005
4	.1560 .1540	56° 15'	.0850 .0840	.198	7° 00'	.025 .019	.015 .008
5	.2460 .2440	56° 15'	.0960 .0950	.311	7° 00'	.030 .024	.035 .025

NOTES:

REFER TO PZFD–6A FOR ADDITIONAL POINT DETAILS

ANGLES E AND 46° ARE MEASURED NORMAL TO THE PLANE OF THE MILLING CUT

WOBBLE LIMITS ON PZG–0 ARE INTENDED FOR CUSTOMER INSPECTION ONLY, AND NORMAL MANUFACTURING LIMITS ARE IN THE ORDER OF ONE–HALF THE TABULATED VALUES.

SIZE (MM)	IFI 502 and 513 –1982	DIN7981	DIN7996	DIN7985
1.6	–	–	–	3PZ00–31
2.2+2	3PZ00–29	3PZ10–187	–	3PZ10–200
2.5	3PZ10–185	–	3PZ10–198	3PZ10–201
2.9+3	3PZ10–186	3PZ10–197	3PZ10–199	3PZ10–202
3.5	3PZ20–680	3PZ20–21	3PZ20–680	3PZ20–702
3.9	–	3PZ20–22	–	–
4.2+4	3PZ20–681	3PZ20–23	3PZ20–700	3PZ20–703
4.5	–	–	3PZ20–701	–
4.8+5	3PZ20–699	3PZ20–25	3PZ20–699	3PZ20–704
5.5	3PZ30–315	3PZ30–21	3PZ30–315	–
6.3+6	3PZ30–314	3PZ30–22	3PZ30–22	3PZ30–313
7	–	–	3PZ30–185	–
8	3PZ40–316	–	3PZ40–9	3PZ40–328
9.5+10	3PZ40–317	–	–	3PZ40–27
12	3PZ40–318	–	–	–

PUNCH NO.	+.006 –.000 A	±.0005 D	+.002 –.000 G	REF J	+.002 –.000 M	+.005 –.000 N	+.005 –.000 O	±.005 S	PUNCH PENETRATION MAX	PUNCH PENETRATION MIN
3PZ00–31	.072	.4375	.032	.054	.032*	.121	.118	.007	.046	.041
3PZ00–29	.073	.4375	.032	.055	.037*	.152	.126	.020	.047	.042
3PZ10–200	.095	.4375	.050	.066	.039*	.152	.157	.010	.053	.048
3PZ10–198	.095	.4375	.050	.066	.046*	.222	.157	–	.053	.048
3PZ10–187	.096	.4375	.050	.068	.041*	.160	.134	.010	.053	.048
3PZ10–185	.101	.4375	.050	.073	.049*	.192	.157	.025	.059	.054
3PZ10–201	.102	.4375	.050	.072	.049*	.192	.197	.025	.060	.055
3PZ10–186	.111	.4375	.050	.082	.056*	.215	.197	.030	.069	.064
3PZ10–197	.114	.4375	.050	.087	.051*	.215	.173	.030	.072	.067
3PZ10–199	.114	.4375	.050	.086	.052*	.261	.189	–	.072	.067
3PZ10–202	.118	.4375	.050	.089	.059*	.231	.236	.035	.076	.071

* HEAD CROWN AND PART OF SIDE HEIGHT IS CONTAINED IN PUNCH

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TITLE: **POZIDRIV® METRIC PAN AND RAISED CHEESE HEAD PUNCHES IFI AND DIN STANDARDS**

DRAWN: J. GRADY	DATE: 09/17/92	DRAWING NUMBER **PPZ-31**
CHECKED: J. GRADY	DATE: 08/28/92	SHEET 1 OF 2

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

PUNCHES FOR METRIC PAN AND RASIED CHEESE HEADS (CONT'D)

PUNCH NO.	+.006 −.000	±.0005	+.002 −.000	REF	+.002 −.000	+.005 −.000	+.005 −.000	PUNCH PENETRATION	
	A	D	G	J	M	N	O	MAX	MIN
3PZ20−21	.154	.4375	.090	.103	.055	.280	.207	.076	.070
3PZ20−680	.153	.4375	.090	.100	.052	.296	.236	.076	.070
3PZ20−702	.160	.4375	.090	.106	.040	.286	.276	.083	.077
3PZ20−22	.162	.5625	.090	.111	.064	.317	.228	.085	.079
3PZ20−700	.162	.5625	.090	.110	.073	.357	.252	.085.	.079
3PZ20−703	.169	.5625	.090	.115	.049	.336	.315	.093	.087
3PZ20−23	.169	.5625	.090	.118	.072	.346	.244	.092	.086
3PZ20−701	.169	.5625	.090	.116	.084	.402	.283	.092	.086
3PZ20−681	.170	.5625	.090	.119	.064	.339	.256	.093	.087
3PZ20−699	.184	.5625	.090	.132	.076	.411	.315	.108	.102
3PZ20−25	.185	.5625	.090	.135	.087	.409	.284	.108	.102
3PZ20−704	.198	.5625	.090	.145	.067	.440	.394	.122	.116
3PZ30−21	.246	.8750	.150	.160	.096	.459	.323	.117	.111
3PZ30−315	.246	.8750	.150	.158	.086	.463	.354	.118	.112
3PZ30−313	.264	.8750	.150	.173	.072	.502	.472	.137	.131
3PZ30−22	.265	.8750	.150	.180	.105	.519	.373	.137	.131
3PZ30−314	.266	.8750	.150	.179	.090	.502	.394	.138	.132
3PZ30−185	.276	.8750	.150	.188	.106	.574	.441	.149	.143
3PZ40−9	.333	1.0000	.198	.213	.118	.665	.527	.164	.158
3PZ40−316	.346	1.2500	.198	.231	.125	.670	.512	.177	.171
3PZ40−328	.346	1.2500	.198	.225	.097	.672	.630	.178	.172
3PZ40−27	.391	1.2500	.198	.271	.147	.913	.782	.224	.218
3PZ40−317	.392	1.2500	.198	.279	.158	.834	.630	.224	.218
3PZ40−318	.427	1.5000	.198	.307	.142	.995	.945	.261	.255

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TITLE: **POZIDRIV® METRIC PAN AND RAISED CHEESE HEAD PUNCHES IFI AND DIN STANDARDS**

DRAWN: J. GRADY	DATE: 09/17/92	DRAWING NUMBER **PPZ-31**
CHECKED: J. GRADY	DATE: 08/28/92	SHEET 2 OF 2

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774−396−6190 FAX: 508−966−2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

RADIAL NOTCHES MUST BE PLAINLY VISIBLE ON HEADED PRODUCT.

SECTION B-B

A MAX. =1.25 MAX. DIA. SPREAD
A MIN. = MAX. DIA. SPREAD

APPROXIMATE, WITH RADIUS BOTTOM

SECTION A-A

POINT SIZE	Z MAX.	R APPROX.
1	.006	.002
2	.006	.002
3	.008	.004
4	.008	.004

REVISION 7/18/07

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POZIDRIV ®
RADIAL NOTCH PUNCH DIMENSIONS

DRAWN R.H. SOMERS	DATE 1–31–64	DRAWING NUMBER **PPZ-100**
CONFIRMED: L. DOUGAN	DATE 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

PHILLIPS II® PHILLIPS® POZIDRIV® ACR® POZISQUARE® PHILLIPS SQUARE-DRIV® TORQ-SET® TRI-WING® MORTORQ® HEXSTIX® POZILOCK® ARE REGISTERED TRADEMARKS OF THE PHILLIPS SCREW COMPANY

SCREW SIZE	A +.001 −.000	B +.002 −.000	C REF	D +.002 −.000	R
2 – 56	.0715	.129	.066	.053	.020
2 – 64	.0730	.129	.066	.053	.020
3 – 48	.0825	.149	.077	.062	.023
3 – 56	.0845	.149	.077	.062	.023
4 – 40	.0925	.171	.088	.070	.026
4 – 48	.0955	.171	.087	.070	.026
5 – 40	.1055	.192	.099	.079	.029
5 – 44	.1070	.192	.098	.079	.029
6 – 32	.1145	.212	.108	.086	.032
6 – 40	.1190	.212	.107	.086	.032
8 – 32	.1405	.253	.129	.104	.038
8 – 36	.1430	.253	.128	.104	.038
10 – 24	.1590	.295	.151	.120	.044
10 – 32	.1665	.295	.148	.120	.044
12 – 24	.1850	.336	.170	.137	.050
12 – 28	.1895	.336	.169	.137	.050
1/4 – 20	.2135	.389	.199	.159	.058
1/4 – 28	.2235	.389	.195	.159	.058
5/16 – 18	.2715	.488	.245	.198	.073
5/16 – 24	.2815	.488	.243	.198	.073
3/8 – 16	.3290	.589	.296	.239	.088
3/8 – 24	.3435	.589	.292	.239	.088
7/16 – 14	.3855	.688	.345	.279	.103
7/16 – 20	.4005	.688	.341	.279	.103
1/2 – 13	.4435	.786	.393	.319	.118
1/2 – 20	.4625	.786	.388	.319	.118

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POZIDRIV® SPRING PUNCH IMPRESSIONS FOR PAN HEAD MACHINE SCREWS

DRAWN	DATE	DRAWING NUMBER
V.W.M. & L.A.P.	3–17–64	**SPZ-7**
CONFIRMED: L. DOUGAN	DATE 11–7–11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774–396–6190 FAX: 508–966–2326

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SCREW SIZE	A +.001 −.000	B +.002 −.000
2 – 56	.0715	.138
2 – 64	.0730	.138
3 – 48	.0825	.161
3 – 56	.0845	.161
4 – 40	.0925	.183
4 – 48	.0955	.183
5 – 40	.1055	.205
5 – 44	.1070	.205
6 – 32	.1145	.227
6 – 40	.1190	.227
8 – 32	.1405	.271
8 – 36	.1430	.271
10 – 24	.1590	.315
10 – 32	.1665	.315
12 – 24	.1850	.359
12 – 28	.1895	.359
1/4 – 20	.2135	.417
1/4 – 28	.2235	.417
5/16 – 18	.2715	.524
5/16 – 24	.2815	.524
3/8 – 16	.3290	.630
3/8 – 24	.3435	.630
7/16 – 14	.3855	.679
7/16 – 20	.4005	.679
1/2 – 13	.4435	.728
1/2 – 20	.4625	.728

REVISION

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POZIDRIV® SPRING PUNCH IMPRESSIONS FOR OVAL HEAD MACHINE SCREWS

DRAWN	DATE	DRAWING NUMBER
V.W.M. & L.A.P.	3–17–64	**SPZ-9**
CONFIRMED: L. DOUGAN	DATE 11–7–11	SHEET 1 OF 1

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PHONE: 774–396–6190 FAX: 508–966–2326

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SCREW SIZE	A +.001 −.000	B +.002 −.000
2 – 56	.0715	.138
2 – 64	.0730	.138
3 – 48	.0825	.161
3 – 56	.0845	.161
4 – 40	.0925	.183
4 – 48	.0955	.183
5 – 40	.1055	.205
5 – 44	.1070	.205
6 – 32	.1145	.227
6 – 40	.1190	.227
8 – 32	.1405	.271
8 – 36	.1430	.271
10 – 24	.1590	.315
10 – 32	.1665	.315
12 – 24	.1850	.359
12 – 28	.1895	.359
1/4 – 20	.2135	.417
1/4 – 28	.2235	.417
5/16 – 18	.2715	.524
5/16 – 24	.2815	.524
3/8 – 16	.3290	.630
3/8 – 24	.3435	.630
7/16 – 14	.3855	.679
7/16 – 20	.4005	.679
1/2 – 13	.4435	.728
1/2 – 20	.4625	.728

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POZIDRIV® SPRING PUNCH IMPRESSIONS FOR FLAT HEAD MACHINE SCREWS

DRAWN	DATE	DRAWING NUMBER
R.H. SOMERS	1–29–64	**SPZ-12**
CONFIRMED: L. DOUGAN	DATE 11–7–11	SHEET 1 OF 1

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SCREW SIZE	A +.001 −.000	B +.002 −.000	C REF	N	R
2 – 56	.0715	.139	.055	.013	.084
2 – 64	.0730	.139	.054	.013	.084
3 – 48	.0825	.163	.064	.015	.098
3 – 56	.0845	.163	.063	.015	.098
4 – 40	.0925	.186	.075	.017	.112
4 – 48	.0955	.186	.074	.017	.112
5 – 40	.1055	.209	.084	.019	.126
5 – 44	.1070	.209	.083	.019	.126
6 – 32	.1145	.233	.094	.021	.140
6 – 40	.1190	.233	.092	.021	.140
8 – 32	.1405	.279	.112	.025	.168
8 – 36	.1430	.279	.111	.025	.168
10 – 24	.1590	.326	.131	.029	.196
10 – 32	.1665	.326	.130	.029	.196
12 – 24	.1850	.373	.150	.034	.224
12 – 28	.1895	.373	.149	.034	.224
1/4 – 20	.2135	.419	.166	.038	.252
1/4 – 28	.2235	.419	.162	.038	.252
5/16 – 18	.2715	.511	.200	.046	.308
5/16 – 24	.2815	.511	.195	.046	.308
3/8 – 16	.3290	.603	.234	.054	.362
3/8 – 24	.3435	.603	.228	.054	.362
7/16 – 14	.3855	.694	.263	.063	.417
7/16 – 20	.4005	.694	.258	.063	.417
1/2 – 13	.4435	.786	.296	.071	.472
1/2 – 20	.4625	.786	.286	.071	.472

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POZIDRIV® SPRING PUNCH IMPRESSIONS FOR TRUSS HEAD MACHINE SCREWS

DRAWN	DATE	DRAWING NUMBER
R.H. SOMERS	1–30–64	**SPZ-15**
CONFIRMED: L. DOUGAN	DATE 11–7–11	SHEET 1 OF 1

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02/28/75
01/04/96
06/25/96
12/30/11
07/25/13

POZIDRIV® ENGINEERING MANUAL

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POZIDRIV ® FORMULA DATA

COMPUTATION OF RECESS DIAMETER & DEPTH

TO FIND "M" RECESS DIAMETER:

REFER TO NOMINAL "A" ON APPROPRIATE PUNCH SHEET (PPZ)
MAX. "M" = NOMINAL "A" +.008
MIN. "M" = NOMINAL "A" −.005

TO FIND "T" RECESS DEPTH:

REFER TO APPROPRIATE PUNCH SHEET FOR "A" DIMENSION, PUNCH TABULATION ON PZFD−6A FOR "G" DIMENSION, AND SHEETS 2−5 FOR "C" VALUES.

MAX. "T" (FOR FLAT TOP HEAD) $= \dfrac{\text{"A"MAX.} - \text{"G" MIN.}}{2(\text{TAN } 26°15')} + \left(\dfrac{\text{"G"MIN.}}{2}\right) \text{ TAN } 28°$

MAX. "T" (FOR CURVED TOP HEADS) $= \dfrac{\text{"A"MAX.} - \text{"G" MIN.}}{2(\text{TAN } 26°15')} + \left(\dfrac{\text{"G"MIN.}}{2}\right) \text{ TAN } 28° - \text{"C"}$

MIN. "T" (FOR ALL HEAD STYLES) = MAX. "T" − PENETRATION TOLERANCE

RECESS SIZE	PENETRATION TOLERANCE
0	.016
1	.016
2	.018
3	.018
4	.018
5	.021

EXAMPLE: #5 PZD PAN HEAD MACHINE & TAPPING EXCEPT TYPE "A"
PUNCH 3PZ20−20

$$\frac{.152-.090}{.98628} + \left(\frac{.090}{2}\right) .532 - .0027 = .084 = \text{MAX. "T"}$$

$$.084 - .018 = .066 = \text{MIN. "T"}$$

REVISION A/ PZCN 97 8−15−67

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TITLE: **POZIDRIV ® FORMULA DATA**

DRAWN	DATE	DRAWING NUMBER
R.H. SOMERS	12−30−65	**PZFD-1**
CONFIRMED: L. DOUGAN	DATE 12−30−11	SHEET 1 OF 4

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OVAL HEAD

PUNCH NO.	C				
	SCREW SIZE	WOOD SCREW	MACH.& TAP.	TYPE A TAP.	TRIM HEAD
3PZ00–8	0	.0016	.0016	.0016	.0016
3PZ00–9	1	.0015	.0015	.0015	.0015
3PZ10–4	2	.0013	.0013	.0013	–
3PZ10–5	3	.0013	.0013	.0013	–
3PZ10–6	4	.0011	.0011	.0011	–
3PZ20–7	5	.0014	.0014	.0014	–
3PZ20–8	6	.0019	.0019	.0019	–
3PZ20–176	6	–	–	–	.0019
3PZ20–9	7	.0020	–	–	–
3PZ20–14	7	–	.0018	.0018	–
3PZ20–10	8	.0018	–	–	–
3PZ20–28	8	–	–	–	.0017
3PZ20–12	8	–	.0018	.0018	–
3PZ20–11	9	.0018	–	–	–
3PZ20–13	10	–	.0017	.0017	–
3PZ30–	10	.0032	–	–	–
3PZ30–8	12	.0033	–	–	–
3PZ30–11	12	–	.0030	.0030	–
3PZ20–255	12	–	–	–	.0017
3PZ20–256	12	–	–	–	.0016
3PZ30–9	14	.0030	–	–	–
3PZ30–12	1/4	–	.0029	–	–
3PZ30–13	14	–	–	.0030	–
3PZ30–10	16	.0033	–	.0033	–
3PZ30–142	16	–	–	.0028	–
3PZ40–6	18	.0043	–	–	–
3PZ40–145	18	–	–	.0040	–
3PZ40–13	5/16	–	.0040	–	–
3PZ40–254	5/16	–	.0040	–	–
3PZ40–7	20	.0040	–	.0040	–
3PZ40–13	20	–	–	.0040	–
3PZ40–10	3/8	–	.0034	–	–
3PZ40–225	3/8	–	.0037	.0040	–
3PZ40–8	24	.0040	–	.0040	–
3PZ40–7	24	–	–	.0040	–
3PZ40–11	7/16	–	.0035	–	–
3PZ40–256	7/16	–	.0033	–	–
3PZ40–12	1/2	–	.0035	–	–
3PZ40–257	1/2	–	.0032	–	–
3PZ40–143	9/16	–	.0020	–	–
3PZ50–7	5/8	–	.0040	–	–
3PZ50–8	3/4	–	.0040	–	–

PAN & FILLISTER HEADS

PUNCH NO.	C			
	SCREW SIZE	WOOD SCREW	MACH.& TAP.	TYPE A TAP.
	0			
	1			
3PZ10–13	2	.0018	.0018	.0018
3PZ10–35	2	–	.0018	.0018
3PZ10–14	3	.0016	.0016	.0016
3PZ10–37	3	–	.0016	.0016
3PZ10–15	4	.0016	.0016	.0016
3PZ10–36	4	–	.0016	.0016
3PZ20–20	5	.0027	.0027	.0027
3PZ20–265	5	–	.0024	.0024
3PZ20–21	6	.0027	.0027	.0027
3PZ20–257	6	–	.0027	.0027
3PZ20–22	7	.0025	.0025	.0025
3PZ20–278	7	–	.0025	.0025
3PZ20–23	8	.0025	.0025	.0025
3PZ20–266	8	–	.0025	.0025
3PZ20–24	9	.0024	–	–
3PZ20–25	10	.0021	.0021	.0021
3PZ20–258	10	–	.0021	.0021
3PZ30–21	12	.0042	.0042	.0042
3PZ30–68	12	–	.0042	.0042
3PZ30–22	1/4	–	.0040	–
3PZ30–22	14	.0040	.0040	–
3PZ30–226	14	–	–	.0040
3PZ30–67	1/4	–	.0040	.0040
3PZ30–185	16	.0032	–	.0032
3PZ30–69	5/16	–	.0028	–
3PZ40–9	5/16	–	.0048	–
3PZ40–201	18	.0040	–	.0040
3PZ40–26	3/8	–	.0038	–
3PZ40–162	3/8	–	.0038	–
3PZ40–9	20	.0048	–	.0048
3PZ40–27	7/16	–	.0032	–
3PZ40–163	7/16	–	.0032	–
3PZ40–26	24	.0038	–	.0038
3PZ40–28	1/2	–	.0030	–
3PZ40–164	1/2	–	.0030	–
3PZ40–142	9/16	–	.0030	–
3PZ50–5	5/8	–	.0050	–
3PZ50–6	3/4	–	.0040	–

NOTE: "C" VALUES AS TABULATED ARE SCALED DIMENSIONS FROM PENETRATION LAYOUTS PER PZFD–3

REVISION	
D	PZCN 116 6–10–68
C	PZCN 72 2–14–66
B	PZCN 59 5–5–65
A	PZCN 44 9–15–64

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TITLE:

POZIDRIV® CURVED TOP HEAD "C" LOSS VALUES

DRAWN	DATE	DRAWING NUMBER
L.A. PROULX	4–1–64	**PZFD-1**
CONFIRMED: L. DOUGAN	DATE 12–30–11	SHEET 2 OF 4

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BINDING HEAD

PUNCH NO.	C		
	SCREW SIZE	MACH SCREW	TYPE A TAP.
3PZ10–63	2	.0008	–
3PZ10–64	3	.0008	–
3PZ10–62	4	.0018	–
3PZ20–144	5	.0018	–
3PZ20–133	6	.0014	–
3PZ20–145	8	.0013	–
3PZ20–143	10	.0013	–
3PZ30–96	12	.0024	–
3PZ30–97	1/4	.0028	–
3PZ40–107	5/16	.0035	–
3PZ40–108	3/8	.0027	–
3PZ00–24	0	.001	–

BRAZIER HEAD

PUNCH NO.	C		
	SCREW SIZE	MACH SCREW	TYPE A TAP
3PZ20–125	6	.0027	–
3PZ20–126	8	.0024	–
3PZ20–127	10	.0021	–
3PZ30–88	1/4	.0040	–
3PZ40–97	5/16	.0062	–
3PZ40–98	3/8	.0054	–
3PZ40–99	7/16	.0048	–
3PZ40–100	1/2	.0045	–

NOTE: "C" VALUES AS TABULATED ARE SCALED DIMENSIONS FROM PENETRATION LAYOUTS PER PZFD–3

REVISION A PZCN 116 6–10–68

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TITLE:

POZIDRIV® CURVED TOP HEAD "C" LOSS VALUES

DRAWN L. WHITE	DATE 5–6–65	DRAWING NUMBER **PZFD-1**
CONFIRMED: L. DOUGAN	DATE 12–30–11	SHEET 3 OF 4

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SPECIAL CURVED TOP HEADS

NO. 1 RECESS		NO. 2 RECESS		NO. 3 RECESS		NO. 4 RECESS		NO. 5 RECESS	
PUNCH NO.	C	PUNCH NO.	C	PUNCH NO.	C	PUNCH NO.	C	PUNCH NO.	C
3PZ10–25	.003	3PZ20–15	.004	3PZ30–16	.006	3PZ40–36	.008		
3PZ10–44	.002	3PZ20–16	.004	3PZ30–17	.006	3PZ40–37	.007		
3PZ10–46	.004	3PZ20–17	.003	3PZ30–18	.005	3PZ40–38	.006		
3PZ10–8	.001	3PZ20–19	.003	3PZ30–19	.005				
		3PZ20–30	.004	3PZ30–20	.005	3PZ40–177	.007		
		3PZ20–45	.004	3PZ20–39	.007	3PZ40–271	.006		
		3PZ20–46	.004	3PZ30–42	.007	3PZ40–272	.004		
		3PZ20–47	.004	3PZ30–43	.007	3PZ40–274	.007		
		3PZ20–48	.004	3PZ30–44	.006	3PZ40–286	.003		
		3PZ20–49	.004	3PZ30–119	.003	3PZ40–287	.002		
		3PZ20–156	.006	3PZ30–140	.004	3PZ40–297	.005		
		3PZ20–165	.003	3PZ30–177	.005	4PZ40–302	.006		
		3PZ20–168	.002	3PZ30–278	.001	3PZ40–308	.0035		
		3PZ20–346	.003	3PZ30–277	.003	3PZ40–31	.0044		
		3PZ20–387	.003	3PZ30–116	.007				
		3PZ30–562	.004	3PZ30–272	.002				
		3PZ20–575	.002	3PZ30–279	.002				
		3PZ20–195	.003	3PZ30–27	.003				
		3PZ20–631	.004						
		3PZ20–633	.003						
		3PZ20–634	.003						
		3PZ20–636	.003						
		3PZ20–637	.000						
		3PZ20–499	.003						
		3PZ20–599	.000						
		3PZ20–223	.001						
		3PZ20–642	.001						
		3PZ20–643	.001						
		3PZ20–648	.003						
		3PZ20–650	.001						
		3PZ20–657	.002						

NOTE: "C" VALUES AS TABULATED ARE SCALED DIMENSIONS FROM PENETRATION LAYOUTS PER PZFD–3

REVISION | PZCN 72, 77, 116, 128, 135, 140, 141, 144, 148, 155, 159, 160, 163, 164, 165, 171, 173, 181, 187 | ECO 26,41 44, 60, 71

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TITLE: **POZIDRIV® CURVED TOP HEAD "C" LOSS VALUES**

DRAWN	DATE	DRAWING NUMBER
L.A. PROULX	11–23–65	**PZFD-1**
CONFIRMED: L. DOUGAN	DATE 12–30–11	SHEET 4 OF 4

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MAX. PEN. (PUNCH OR SCREW) = I' MAX. + M

$$\text{MAX. PEN. (PUNCH OR SCREW)} = \frac{\text{A MAX. (PUNCH)} - \text{G MIN.(GAGE)}}{2(\text{TAN.}26°15')} + \left(\frac{\text{G MIN.(GAGE)} - \text{MIN. FLAT}}{2}\right)\text{TAN. } 18°15'$$

MIN. PEN.(SCREW) = MAX. PEN.(PUNCH OR SCREW)−ALLOWANCE

$$\text{MIN. PEN.(SCREW)} = \text{MAX. PEN.(PUNCH OR SCREW)} - \frac{\text{ALLOWANCE}}{3}$$

	ALLOWANCE
NO. 0 POINT SIZE	.016
NO. 1 POINT SIZE	.016
NO. 2 POINT SIZE	.018
NO. 3 POINT SIZE	.018
NO. 4 POINT SIZE	.018
NO. 5 POINT SIZE	.021

EXAMPLE: 3PZ40−79 (FLAT HD. STRIKER PLATE SCREW)

$$\text{MAX. PEN.(PUNCH OR SCREW)} = \frac{.315-.203}{2(.49314)} + \left(\frac{.203-.015}{2}\right).32975 = .145$$

MAX. PEN.(PUNCH OR SCREW) = .145

MIN. PEN.(SCREW) = .145−.018 = .127

MIN. PEN.(PUNCH) = .145−.006 = .139

−.005 ON #0 AND #1 RECESS SIZES

REVISION		
A	PZCN 47	8−15−67
B	PZCN 160	8−12−75
1/	ECO 117	5−25−95
	REDRAWN	6−5−95

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TITLE: **POZIDRIV ® TYPICAL FLAT HEAD PENETRATION LAYOUT**

DRAWN	DATE	DRAWING NUMBER
S. GREGORY	6−5−95	**PZFD-2**
CONFIRMED L.DOUGAN	DATE 12−30−11	SHEET 1 OF 1

PHILLIPS SCREW CO., 155 FARM STREET, BELLINGHAM, MA 02019 U.S.A.
PHONE: 774−396−6190 FAX: 508−966−2326

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MAX. PEN. (PUNCH OR SCREW) = L+M−C

$$\text{MAX. PEN. (PUNCH OR SCREW)} = \frac{\text{A MAX. "PUNCH"} - \text{G MIN."GAGE"}}{2(\text{TAN.}26^\circ\ 15')} + \left(\frac{\text{G MIN."GAGE"} - \text{MIN. FLAT}}{2}\right)\text{TAN. } 18^\circ 15' - C$$

MIN. PEN."SCREW" = MAX. PEN."PUNCH OR SCREW"−ALLOWANCE

$$\text{MIN. PEN. PUNCH} = \text{MAX. PEN. "PUNCH OR SCREW"} - \left(\frac{\text{ALLOWANCE}}{3}\right)$$

POINT SIZE	ALLOWANCE
NO. 0 POINT SIZE	.016
NO. 1 POINT SIZE	.016
NO. 2 POINT SIZE	.018
NO. 3 POINT SIZE	.018
NO. 4 POINT SIZE	.018
NO. 5 POINT SIZE	.021

EXAMPLE: 3PZ20−25 (#10 POZIDRIV PAN HEAD)

$$\text{MAX. PEN.(PUNCH OR SCREW)} = \frac{.191-.095}{2(.49314)} + \left(\frac{.095-.015}{2}\right).32975 - .0021 = .108$$

MAX. PEN."PUNCH OR SCREW" = .108

MIN. PEN."SCREW" = .108−.018 = ..090

MIN. PEN."PUNCH" = .108−.006 = .102

−.005 ON #0 AND #1 RECESS SIZES

REVISION	
A	PZCN 97 8−15−67
B	PZCN 160 8−12−75
1/	ECO 117 5−25−95

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TITLE: **POZIDRIV® TYPICAL CURVED TOP HEAD PENETRATION LAYOUT**

DRAWN	DATE	DRAWING NUMBER
L.A. PROULX	3−17−64	**PZFD-3**
CONFIRMED: L. DOUGAN	DATE 12−30−11	SHEET 1 OF 1

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$$N\ MIN. = F\ MIN. + D - C - 2E$$

$$N\ MIN. = F\ MIN. + \frac{(A\ MIN. - G\ MAX.)\ (TAN\ S1 - TAN\ S)}{2\ TAN\ 26°\ 30'} - (A\ MIN. - G\ MAX.)\ TAN\ 1°$$

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TITLE: **POZIDRIV® MINIMUM RECESS WING WIDTH FORMULA**

DRAWN: L.A. PROULX	DATE: 03/17/64	DRAWING NUMBER **PZFD-5**
CONFIRMED: L. DOUGAN	DATE: 12−30−11	SHEET 1 OF 1

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CASE 1

WHEN 0 HEAD RADIUS FALLS INSIDE 26° 30′ ANGLE

$R = \frac{G}{2} \text{ TAN } 28° = \frac{G}{2} (.53171)$

$X = \frac{G}{2} \text{ COT } 26° 30' = \frac{G}{2} (2.0057)$

$Y + 0 = J + X - R$

$Y = J + X - R - 0$

$\text{SIN } B = \frac{Y \text{ SIN } 153° 30'}{0} = \frac{Y \text{ SIN } 26° 30'}{0}$

$C = 26° 30' + B$

$A = 2(0) \text{ SIN } C$

CASE 2

WHEN 0 HEAD RADIUS FALLS OUTSIDE 26° 30′ ANGLE

$R = \frac{G}{2} \text{ TAN } 28° = \frac{G}{2} (.53171)$

$X = \frac{G}{2} \text{ COT } 26° 30' = \frac{G}{2} (2.0057)$

$0 - Y = J + X - R$

$Y = 0 + R - J - X$

$\text{SIN } B = \frac{Y \text{ SIN } 153° 30'}{0} = \frac{Y \text{ SIN } 26° 30'}{0}$

$C = 26° 30' - B$

$A = 2(0) \text{ SIN } C$

NOTE:
USE NOMINAL 0,J, AND G DIMENSIONS
FOR PUNCH REQUIRED.

1/ ECO 117
05/25/95

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TITLE:

POZIDRIV® CURVED TOP HEAD RECESS SPREAD FORMULA

DRAWN: L.A. PROULX	DATE: 03/17/64	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 12–30–11	**PZFD-5A** SHEET 1 OF 1

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NO. 0 AND 1 POINT SIZES
ENLARGED DETAIL AT "B" PLANE, NO RIB FORM EXISTS AT "B" PLANE

NOS. 2,3 4 & 5 POINT SIZES
ENLARGED DETAIL AT "B" PLANE

SECTION A–A

(1) ANGLES "C" AND "E" ARE FORM CUTTER ANGLES IN THE PLANE OF THE MILLING CUT FORMED BY THE MILLING ANGLE "H" AND THE OFFSET ANGLES "U" AND "W".
(2) ANGLE "H" IS MEASURED IN A VERTICAL PLANE THROUGH THE LONGITUDINAL AXIS OF THE WORKPIECE, AT 45° TO THE CENTERLINE OF THE WINGS AT THE "G" PLANE.
(3) ANGLES "U" AND "W" ARE MEASURED IN THE "H" PLANE, WHICH IS A PLANE PASSING THROUGH THE "H" ANGLE AT 45° TO THE "G" PLANE CENTERLINE OF THE WINGS.
(4) ANGLES "S" AND "S_1" ARE MEASURED IN A PLANE PARALLEL TO THE CENTERLINE OF THE TWO ADJACENT WINGS AT "G" PLANE AND PARALLEL TO THE LONGITUDINAL AXIS OF THE WORKPIECE.
(5) DIMENSION "F" (FOR PUNCH) IS SYMMETRICAL IN THE "G" PLANE FOR NOMINAL VALUES OF "R" AND "K".
(6) COLUMNS MARKED "*" ARE DERIVED DIMENSIONS.
(7) STANDARD OR TRUE FIT DESIGNATED BY "T" AND FREE OR LOOSE FIT DESIGNATED BY "F".

REVISION
A PZCN 117 6–12–68

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TITLE:

POZIDRIV® MASTER DRAWING DIMENSIONS

DRAWN:	DATE:	DRAWING NUMBER
L.A. PROULX	04/18/67	**PZFD-6A**
CONFIRMED: L. DOUGAN	DATE: 12–30–11	SHEET 1 OF 2

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GAGE

POINT SIZE	B	C (+07′ −00′)	D (+00′ −15′)	E (+07′ −00′)	F	G	H (+00′ −06′)	K (* THEO.)	R	S (*)	SI (*)	U (+06′ −00′)	W (+06′ −00′)	X (*)	Y (*)	Z (+15′ −00′)
0	.0280 .0265	46° 00′	26° 30′	46° 00′	.0175 .0165	.036 .035	7° 00′	.0005 .0000	.004 .003	22′	2° 00′	4° 23′	7° 45′	1° 43′	12° 45′	18°
1	.0438 .0423				.0275 .0265	.055 .054		.0009 .0005	.005 .004					1° 43′	12° 45′	
2	.0670 .0655				.0390 .0380	.096 .095	5° 45′	.0043 .0020	.008 .006	17′	2° 04′	3° 00′	6° 20′	1° 41′	10° 12′	
3	.1020 .1005			56° 15′	.0540 .0530	.156 .155		.0106 .0074	.012 .008					1° 41′	8° 51′	
4	.1520 .1505				.0820 .0810	.204 .203	7° 00′	.0136 .0095	.020 .014	22′	2° 00′	4° 23′	7° 45′	1° 43′	11° 00′	
5	.2420 .2400				.0920 .0910	.316 .315		.0434 .0395	.040 .035					1° 43′	11° 00′	

DRIVER

POINT SIZE	B	C (+15′ −00′)	D (+30′ −00′)	E (+15′ −00′)	F	G	H (+00′ −30′)	K (* THEO.)	R	S (*)	SI (*)	U (+30′ −00′)	W (+30′ −00′)	X (*)	Y (*)	Z (+1° −0°)
0	.0280 .0265	46° 00′	26° 30′	46° 00′	.0175 .0165	.036 .035	7° 00′	.0005 .0000	.004 .003	22′	2° 00′	4° 23′	7° 45′	1° 43′	12° 45′	18°
1	.0438 .0423				.0275 .0265	.055 .054		.0009 .0004	.005 .004					1° 43′	12° 45′	
2	.0670 .0655				.0390 .0370	.096 .094	5° 45′	.0051 .0003	.012 .006	17′	2° 04′	3° 00′	6° 20′	1° 41′	10° 12′	
3F	.0990 .0980			56° 15′	.0520 .0510	.156 .154		.0106 .0066	.014 .008					1° 41′	8° 51′	
3T (PREFERRED)	.1020 .1000				.0540 .0530	.156 .154		.0106 .0062	.014 .008					1° 41′	8° 51′	
4F	.1490 .1480				.0790 .0780	.204 .202	7° 00′	.0143 .0103	.020 .014	22′	2° 00′	4° 23′	7° 45′	1° 43′	11° 00′	
4T (PREFERRED)	.1520 .1500				.0820 .0800	.204 .202		.0143 .0092	.020 .014					1° 43′	11° 00′	
5F	.2380 .2360				.0890 .0870	.316 .314		.0443 .0375	.045 .035					1° 43′	11° 00′	
5T (PREFERRED)	.2420 .2400				.0920 .0900	.316 .314		.0441 .0374	.045 .035					1° 43′	11° 00′	

PUNCH

POINT SIZE	B	C (+00′ −07′)	D (+00′ −15′)	E (+00′ −07′)	F	G	H (+15′ −00′)	K (* THEO.)	R	S (*)	SI (*)	U (+00′ −15′)	W (+00′ −15′)	X (*)	Y (*)	Z (+0° −1°)
0	.0300 .0285	46° 00′	26° 30′	46° 00′	.0190 .0180	.034 .032	7° 00′	.0004 .0000	.004 .003	22′	2° 00′	4° 23′	7° 45′	1° 43′	12° 45′	28°
1	.0500 .0480				.0290 .0280	.052 .050		.0033 .0022	.005 .003					1° 43′	12° 45′	
2	.0720 .0700				.0405 .0395	.092 .090	5° 45′	.0072 .0042	.006 .003	17′	2° 04′	3° 00′	6° 20′	1° 41′	10° 12′	
3	.1070 .1050			56° 15′	.0560 .0550	.152 .150		.0134 .0095	.010 .005					1° 41′	8° 51′	
4	.1560 .1540				.0850 .0840	.200 .198	7° 00′	.0165 .0117	.015 .008	22′	2° 00′	4° 23′	7° 45′	1° 43′	11° 00′	
5	.2460 .2440				.0960 .0950	.313 .311		.0475 .0415	.035 .025					1° 43′	11° 00′	

REVISION

A PZCN 117
6-12-68

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TITLE:

POZIDRIV® MASTER DRAWING DIMENSIONS

DRAWN: L.A. PROULX	DATE: 04/18/67	DRAWING NUMBER
CONFIRMED: L. DOUGAN	DATE: 12-30-11	**PZFD-6A** SHEET 2 OF 2

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S_I IS THE ANGLE FORMED BY THE AXIS 0–0 AND A LINE FROM 0 TO THE INTERSECTION OP THE SIDE WALL OF Q WITH A PLANE AT 45° TO THE HORIZONTAL REFERENCE PLANE PASSING THROUGH 0–0.

REVISION	A PZCN 24 9-10-63

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TITLE:

POZIDRIV®
DERIVATION OF S & S_I ANGLES

DRAWN	DATE	DRAWING NUMBER
L.A. PROULX	7–26–63	**PZFD - 9**
CONFIRMED: L. DOUGAN	DATE 12–30–11	SHEET 1 OF 2

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$$\cos U = \frac{Z}{X},\ \tan Q = \frac{X}{Y},\ \tan R = \frac{Z}{Y},\ \tan C = \frac{Z}{Y'},\ \cos H' = \frac{Y'}{Y}$$

$$\tan Q = \frac{\tan R}{\cos U},\ \tan R = \tan C \cos H'$$

$$\tan Q = \frac{\tan C \cos H'}{\cos U}$$

$$\sin H = \frac{B}{D},\ \sin H' = \frac{B}{F},\ \sec U = \frac{F}{D}$$

$$\sin H' = \frac{\sin H}{\sec U}$$

$$\cos H' = \frac{\sqrt{\sec^2 U - \sin^2 H}}{\sec U}$$

$$\tan Q = \tan C \sqrt{\sec^2 U - \sin^2 H}$$

$$\tan U = \frac{A}{D},\ \tan N = \frac{A}{B},\ \tan H = \frac{B}{L},\ \cos N = \frac{B}{T},\ \tan E = \frac{T}{L}$$

$$\tan N = \frac{\tan U}{\sin H},\ \tan E = \frac{\tan H}{\cos N}$$

$$\tan S_1 = \frac{P}{L},\ \frac{P}{\sin V} = \frac{T}{\sin J}$$

$$\tan S_1 = \frac{\tan E \sin V}{\sin J},\ J = 135^\circ - Q,\ V = Q - N$$

$$\tan S_1 = \frac{\tan E \sin (Q - N)}{\sin (135^\circ - Q)} = \frac{\tan H \sin (Q - N)}{\cos N \sin (135^\circ - Q)} = \frac{\tan H (\sin Q \cos N - \cos Q \sin N)}{\cos N (\sin 135^\circ \cos Q - \cos 135^\circ \sin Q)}$$

$$\tan S_1 = \frac{\sin H \tan C \sqrt{\sec^2 U - \sin^2 H} - \tan U}{\sin 135^\circ \cos H - \cos 135^\circ \cos H \tan C \sqrt{\sec^2 U - \sin^2 H}}$$

S angle is developed in similar manner using "W" offset angle.

$$\tan S = \frac{\sin H \tan C \sqrt{\sec^2 W - \sin^2 H} - \tan W}{\sin 135^\circ \cos H - \cos 135^\circ \cos H \tan C \sqrt{\sec^2 W - \sin^2 H}}$$

Where C = 1/2 Cutter Angle (46°)

PZFD-9 SHEET 2 OF 2

REVISION

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POINT SIZE	B_3	F_1	G_1	TIP EXTENSION J	C	D
0	.0277	.0179	.028	.004	.078	53° 00′
1	.0476	.0279	.048	.002	.116	52° 30′
2	.0684	.0392	.080	.010	.172	52° 00′
3	.1034	.0547	.140	.010	.254	51° 47′
4	.1521	.0837	.188	.010	.321	52° 14′
5	.2421	.0947	.301	.010	.432	52° 30′

NOTE:
(1) REFER TO PZFD–6A FOR BASIC DIMENSIONS NOT SHOWN ON THIS DRAWING.
(2) DIMENSIONS B_3 AND G_1 DEVELOPED PER PZMP–2.
(3) 3/4 FOR #5 POINT SIZE.
(4) J DIMENSION CHOSEN SO THAT B_3 REMAINS SMALLER THAN G_1.

REVISION	
C	PZCN 111 2–16–68
B	PZCN 110 2–12–68
A	PZCN 72 2–14–66

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TITLE: **POZIDRIV ® MASTER PUNCH**

DRAWN	DATE	DRAWING NUMBER
L.A. PROULX	3–20–64	**PZMP-1**
CONFIRMED: L. DOUGAN	DATE 12–30–11	SHEET 1 OF 1

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$C = .010 \text{ TAN } D/2$
$X = C \text{ TAN } Z$
$Y = .010 - X$
$G_1 = G - 2C$

NOTE:
REFER TO PZMP-1 FOR D ANGLE AND ALL OTHER DIMENSIONS ON PZFD-6A.

VIEW A & B

VIEW A

$\angle A = 90° - Z - \angle B$
$\angle B = H \text{ MILLING ANGLE}$
$\angle C = 90° + Z$

$$b = \frac{Y \text{ SIN } \angle B}{\text{SIN } \angle A}$$

$a = b \text{ COS } Z$
$B_3 = B - 2a$

REVISION

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TITLE: **POZIDRIV® MASTER PUNCH TIP EXTENSION FORMULA DATA**

DRAWN	DATE	DRAWING NUMBER
R.H. SOMERS	1-31-64	**PZMP-2**
CONFIRMED: L. DOUGAN	DATE 12-30-11	SHEET 1 OF 1

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