

SUBJECT:	Gold Seal Harness
REASON FOR BULLETIN:	To Inform Users of New Part Numbers For the New TCM Gold Seal Harnesses, Leads and Spare Parts, Interchangeability With Dura-Blue Harness Hardware and New Procedures For Gold Seal Assembly
EQUIPMENT AFFECTED:	Harnesses and Leads For TCM (Bendix) S-20, S-200, S-1200, D-2000, D-3000 Series Magnetos and Slick 4200 and 6200 Series Magnetos

Maintenance (Spare) Parts Affected:

All TCM (Bendix) Gold Seal and Dura-Blue Ignition Harnesses and Spare Leads.

Compliance:

Whenever maintenance is performed on affected parts.

Detailed Instructions:

1. The new Gold Seal Harnesses and Spare Leads will be supplied in lieu of the Dura-Blue Harnesses and Spare Leads previously provided. These new Gold Seal Harnesses have the following features:

- Easy-grip spark plug Ferrules.
- Simplified assembly.
- Optional 3-way adjustable elbow clamps for both 5/8-24 and 3/4-20 spark plug terminals.
- Widest application coverage.
- Across the board ready-to-fit (Magneto and spark plug ends assembled) design.
- Competitively priced.

Retained Features

- Scuff resistant silicone rubber cable jacket.
- Individual resilient silicone outlet plate grommets.
- Tightly woven copper braid for minimum Radio Frequency Interference (RFI) radiation.
- Complete flexibility at -65°F; withstands temperature to +400°F.
- 5MM (inner insulation diameter) cable.
- Completely repairable; all components supplied as spares.

2. Publications X43001 and X42003 specify installation and repair procedures for Dura Blue Harnesses. These procedures, when used in conjunction with the interchangeability figures provided in this Bulletin, and the following assembly procedure, may be used to maintain Gold Seal Harnesses.

3. To assemble Gold Seal Braid Retaining Eyelet (P/N 10-400093) into any Gold Seal Spark Plug Outer Ferrule or Gold Seal Magneto Outlet Plate/Cover/Cap:

- a. Insure 3/16 inch of silicone jacket is stripped from end of shielding as shown in Figure 2.
- b. Insert P/N 10-400093 Eyelet under braiding to position shown in Figure 2.
- c. Pull cable with correctly positioned eyelet into ferrule or outlet and fully seat using a suitable pressing tool. See Figure 1) for pressing tool dimensions.

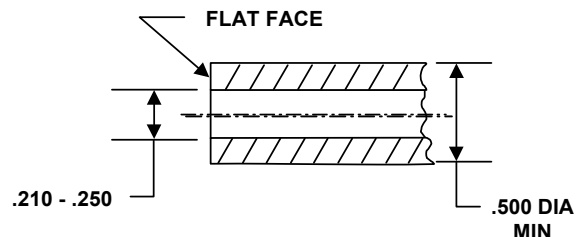


FIGURE 1: EYELET PRESSING TOOL DIMENSIONS

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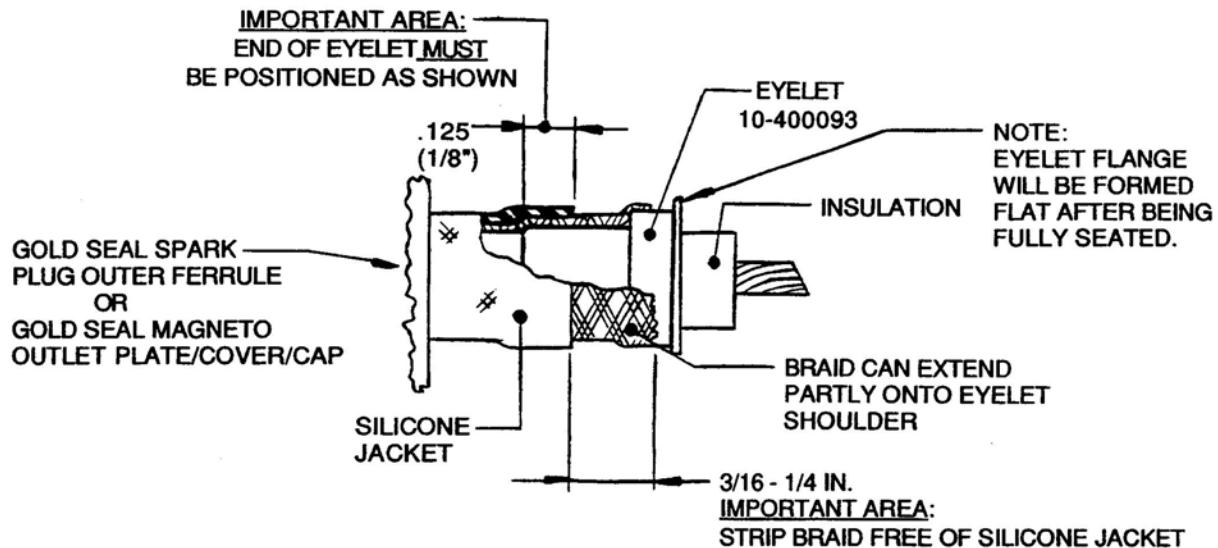


FIGURE 2: POSITIONING OF BRAID ON EYELET, CUTAWAY VIEW

TABLE 1

UNIVERSAL HARNESS KITS SUPERSEDURE

- Each kit contains two leads for each cylinder.
- Leads are assembled at the spark plug end.
- Hardware for attachment to Dura-Blue, Gold Seal and Gold Seal SK Magneto Outlet Plates is provided.

NO. OF CYL.	SPARK PLUG	DURA-BLUE P/N	GOLD SEAL P/N
6	3/4-20	10-94460-52	10-400416
6	5/8-24	10-94460-53	10-400426
4	3/4-20	10-94460-54	10-400414
4	5/8-24	10-94460-55	10-400424

TABLE 2

SPARE LEAD SUPERSEDURE

- P/N suffix is lead length in inches
- Hardware for attachment to Dura-Blue, Gold Seal and Gold Seal SK Magneto outlet plates is provided.

SPARK PLUG	DURA-BLUE P/N	GOLD SEAL P/N
3/4-20	10-720631-48	10-400401-48
3/4-20	10-720631-72, 78	10-400401-78
5/8-24	10-720632-48	10-400402-48
5/8-24	10-720632-72	10-400402-78
3/4-20	10-720641-29, -41	10-400401-48*
3/4-20	10-720641-53, -65, -74	10-400401-78*
5/8-24	10-720642-29, -41	10-400402-48*
5/8-24	10-720642-53, -65, -74	10-400402-78*

* Also use 10-944460-60 Kit to attach lead to Bendix Threaded Outlet Plate, Pancake Grommet Assembly, or Slick 400 and 600 Series Magnetos.

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TABLE 3

HARNESSES FOR TCM S-20, S-200 AND S-1200 MAGNETO APPLICATIONS SUPERSEDURE

NOTE: For complete Harness-to-Engine Application Data, refer to Publication Form X44001-1.

DURA-BLUE HARNESS P/N	SUPERSEDED BY GOLD SEAL HARNESS P/N
10-720095-5; 105, -108	10-823674-1
10-720095-7, -107, -108	10-823684-1
10-720095-9	10-823671-1
10-720095-118	10-823694-1
10-720178-104	10-821674-22
10-720315-102	10-821474-5
10-720320-2, -102, -104, -108, -109	10-821674-3
10-720325-4	10-821471-1
10-720326-2	10-821471-2
10-720326-3	10-821474-2
10-720365-102	10-821674-92
10-720405-3	10-821672-24
10-720410-3	10-821471-2
10-720420-2, -102	10-823674-5
10-720420-3, -103	10-823684-5
10-720420-113	10-821694-5
10-720435-1, -3, -4	10-821685-8
10-720445-1	10-821685-16
10-720465-2	10-821685-12
10-720470-2, -3	10-821681-2
10-720470-4	10-821681-2
10-720470-5	10-821681-2
10-720470-6	10-821671-2
10-720480-1, -3	10-821685-10
10-720505-1	10-821481-2
10-720510-1, -2, -3	10-821481-2
10-720510-4	10-822482-2
10-720515-1	10-821681-2
10-720515-3	10-821684-2
10-720515-5	10-821685-18
10-720515-203	10-821695-2
10-720570-4, -5	10-821885-4
10-720570-14	10-821895-4
10-720580-1	10-821685-14
10-720580-11	10-821695-14
10-720605-3	10-821675-18
10-720605-1, -5	10-821672-18

TABLE 3

(CONTINUED)

DURA-BLUE HARNESS P/N	SUPERSEDED BY GOLD SEAL HARNESS P/N
10-720605-4, -5	10-821685-18
10-720640-1	10-821672-9
10-720645-1	10-821471-2
10-720645-2	10-821474-2
10-720655-1	10-821471-1
10-720690-1	10-821471-3
10-720695-1	10-821471-1
10-720700-1	10-821471-3
10-720710-1	10-821471-2
10-720710-101	10-821474-2
10-721002-2	10-821684-26
10-721005-2	10-821471-2
10-721008-2	10-821484-2
10-721009-2	10-821681-2
10-721011-2	10-821481-2
10-721013-2	10-821675-18
10-721014-2	10-821675-18
10-721015-2	10-821474-2
10-721018-2	10-821681-2
10-721019-2	10-821484-14
10-721020-2	10-821684-28
10-721021-2	10-821684-30
10-721022-2	10-821684-2
10-721024-2	10-821671-2
10-721025-2	10-821481-2
10-721026-2	10-821671-2
10-721033-2	10-821671-2
10-721034-2	10-821671-32
10-721036-2	10-821481-2
10-721040-2	10-821481-2
10-721041-2	10-821481-2
10-721042-2	10-821481-2
10-724771-1	10-820471-91
10-726714-1	10-823674-1
10-726714-2	10-823674-7
10-726714-3	10-821674-2
10-726814-1	10-823684-7

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TABLE 4

D-2000 & D-3000 SERIES HARNESS SUPERSEDURE*

D-3000 DURA-BLUE HARNESS P/N	SUPERSEDED BY GOLD SEAL HARNESS P/N
10-684400-303	10-821414-6**
10-684400-305	10-821444-6
10-684405-303	10-821414-8
10-684406-103	10-821414-4
10-684406-303	10-821414-4
10-684407-303	10-821414-10
10-684408-302	10-821414-6
10-684409-102	10-821415-12
10-684409-106	10-821425-12
10-684411-402	10-821414-14
10-684412-106	10-821425-12
10-684444-602	10-821412-93
10-684602-303	10-821614-6
10-684602-305	10-821644-6
10-684602-307	10-821624-6
10-684604-103	10-821615-4
10-684604-109	10-821635-4
10-684604-126	10-821625-4
10-684607-102	10-821615-20
10-684609-302	10-821614-6
10-684610-126	10-821625-34
10-684672-138	10-821635-11
10-684800-107	10-821825-2
10-684800-127	10-821825-2
10-684801-107	10-821825-2

* For complete Harness-to-Engine and System-to-Engine Application Data, refer to Publication Form X44001-1.

** For O-360-A1AD engines, use P/N 10-785124-131 System and P/N 10-820414-6.

TABLE 5

D-3000 SERIES MAGNETO & HARNESS SYSTEM SUPERSEDURE*

D-3000 SYSTEM WITH DURA-BLUE P/N	SUPERSEDED BY D-3000 WITH GOLD SEAL P/N
10-685046-109	10-785046-109
10-685046-110	10-785046-110
10-685046-118	10-785046-118
10-685046-119	10-785046-119
10-685048-101	10-785048-101
10-685124-106	10-785124-106 **
10-685124-110	10-785124-110
10-685124-111	10-785124-111
10-685124-112	10-785124-112
10-685124-113	10-785124-113
10-685124-115	10-785124-115
10-685124-116	10-785124-116
10-685124-118	10-785124-118
10-685124-121	10-785124-121
10-685124-122	10-785124-115
10-685124-123	10-785124-106
10-685124-124	10-785124-124
10-685124-129	10-785124-129
10-685124-130	10-785124-130
10-685124-704	10-785124-704
10-685126-105	10-785126-105
10-685126-107	10-785126-107
10-685126-109	10-785126-109
10-685126-111	10-785126-111
10-685126-112	10-785126-105
10-685144-112	10-785144-114
10-685144-114	10-785144-114
10-685146-106	10-785146-106
10-685146-111	10-785146-111
10-685148-101	10-785148-102
10-685148-102	10-785148-102
10-685164-112	10-785164-112
10-685164-113	10-785164-113
10-685166-107	10-685166-107
10-685186-109	10-785186-109
10-685286-402	10-785286-402

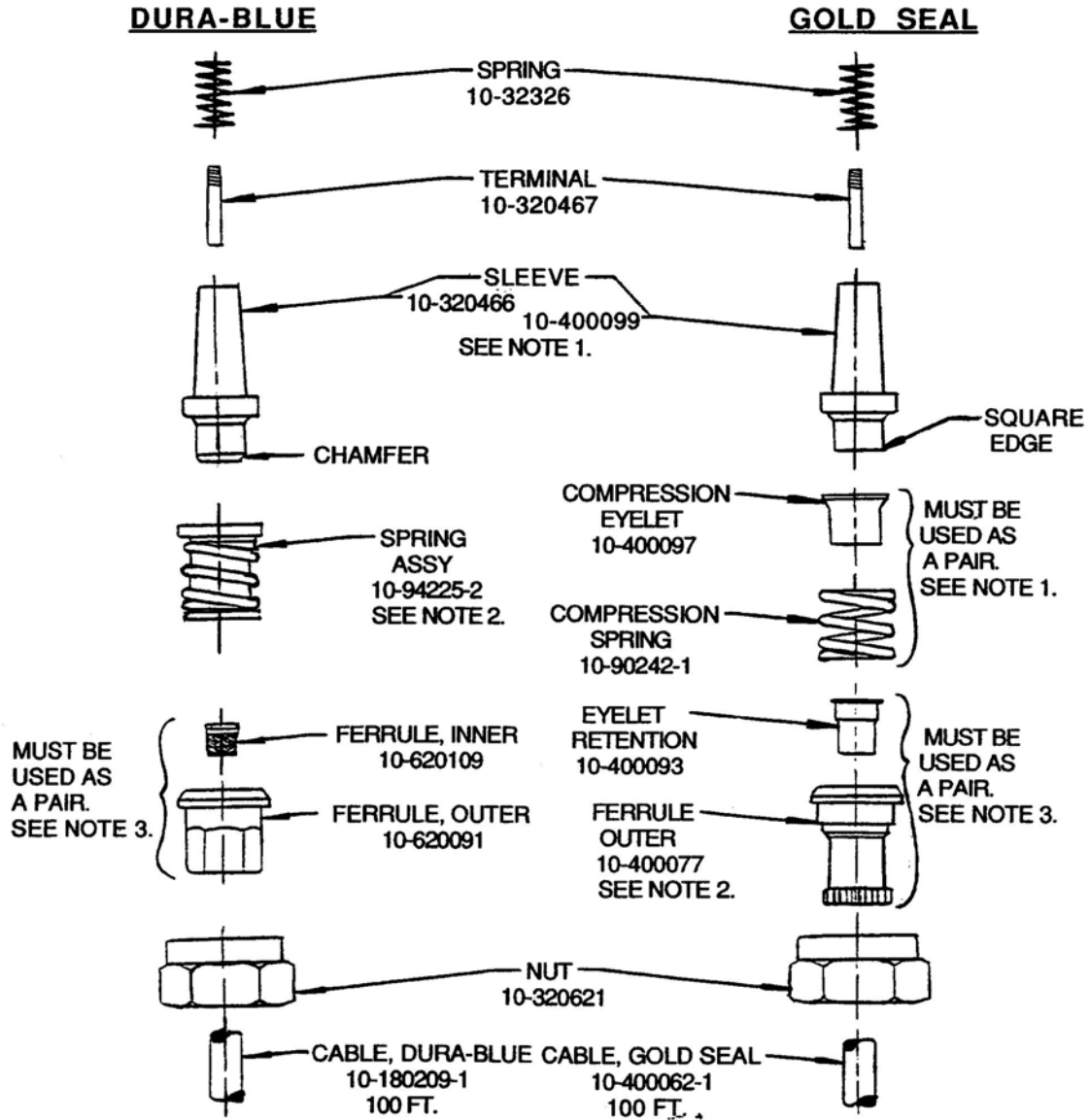


FIGURE 3: 3/4-20 SPARK PLUG TERMINAL PARTS INTERCHANGEABILITY

NOTES:

- 1) Sleeve 10-320466 cannot be used with Eyelet 10-400097. Otherwise, indicated sleeves and spring arrangements are interchangeable.
- 2) May be used with 10-400112-8 or -12 Bend Clamp Kit. See Figure 7.
- 3) Parts may be interchanged as a pair. Dura-Blue or Gold Seal Cable may be used with either Ferrule & Eyelet arrangement.

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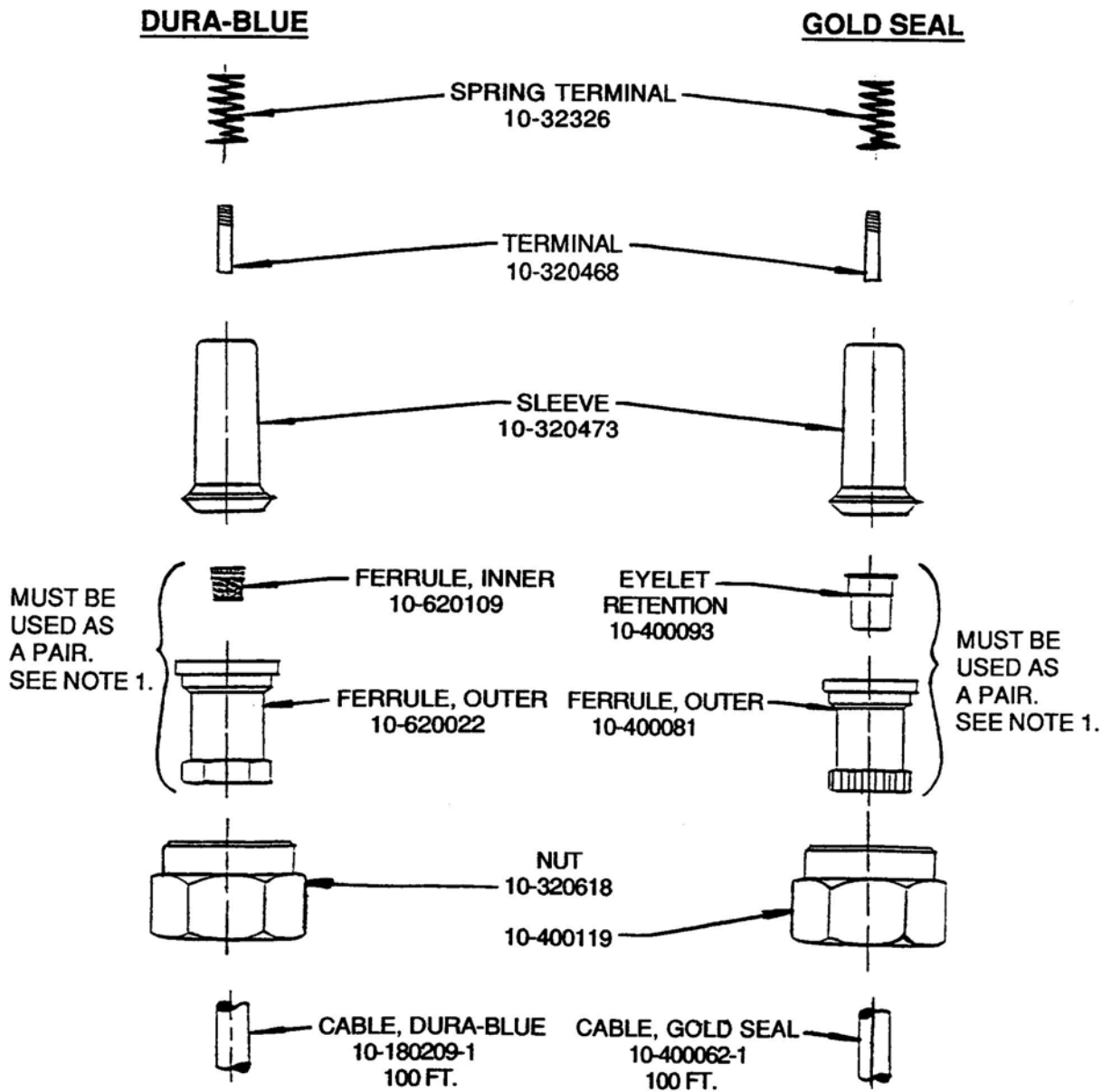


FIGURE 4: 5/8-24 SPARK PLUG TERMINAL PARTS INTERCHANGEABILITY

NOTES:

- 1) Parts may be interchanged as a pair. Dura-Blue or Gold seal Cable may be used with either Ferrule and Eyelet arrangement. Either outer Ferrule may be used with 10-400112-8 or -12 Bend Clamp Kit. See Figure 7.

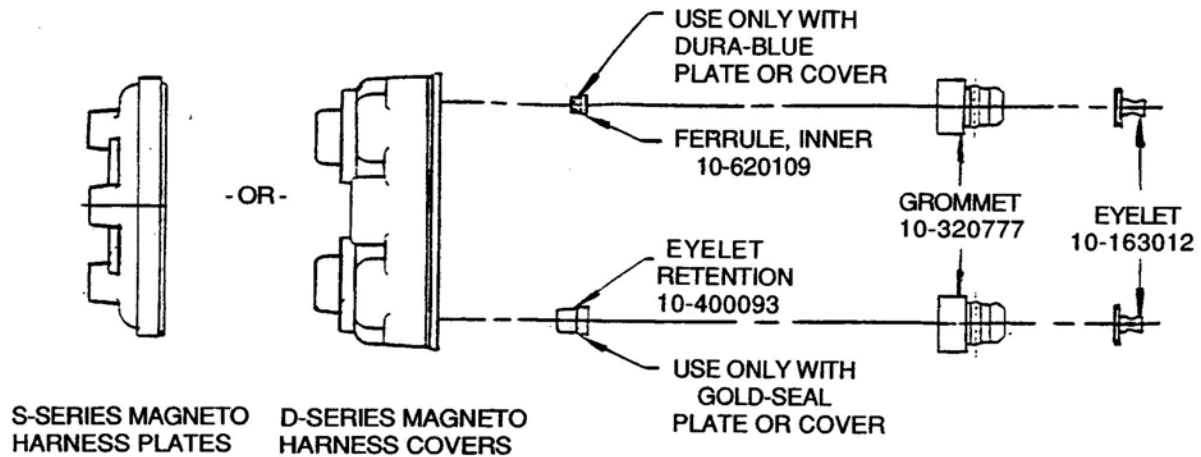


FIGURE 5: TCM (BENDIX) MAGNETO OUTER PLATE PARTS INTERCHANGEABILITY

NOTES:

- 1) Current Dura-Blue Plates/Covers are marked with "••" (older units are not marked). Use with 10-620109 Ferrule only.
- 2) Gold Seal Plates/Covers are marked with "TCM Gold Seal". Use with 10-400093 Retention Eyelet only.
- 3) Interchangeability of TCM Gold Seal Harness parts with any other brand of Harness parts is not guaranteed.

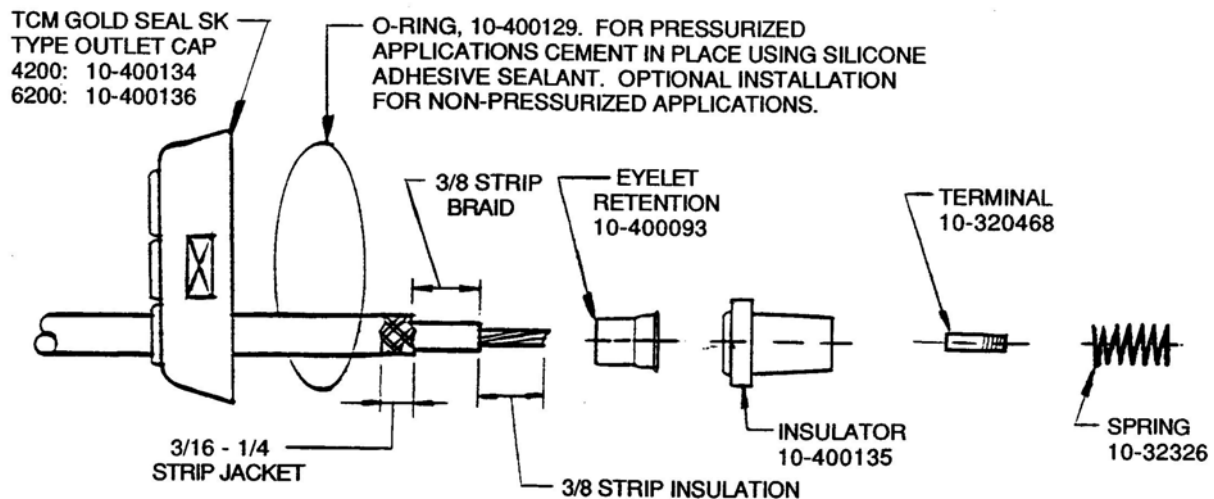


FIGURE 6: TCM GOLD SEAL SK TYPE MAGNETO OUTLET CAP ARRANGEMENT FOR SLICK 4200 AND 6200 SERIES MAGNETOS

NOTE: Interchangeability of TCM Gold Seal Harness parts with any other brand of Harness parts is not guaranteed.

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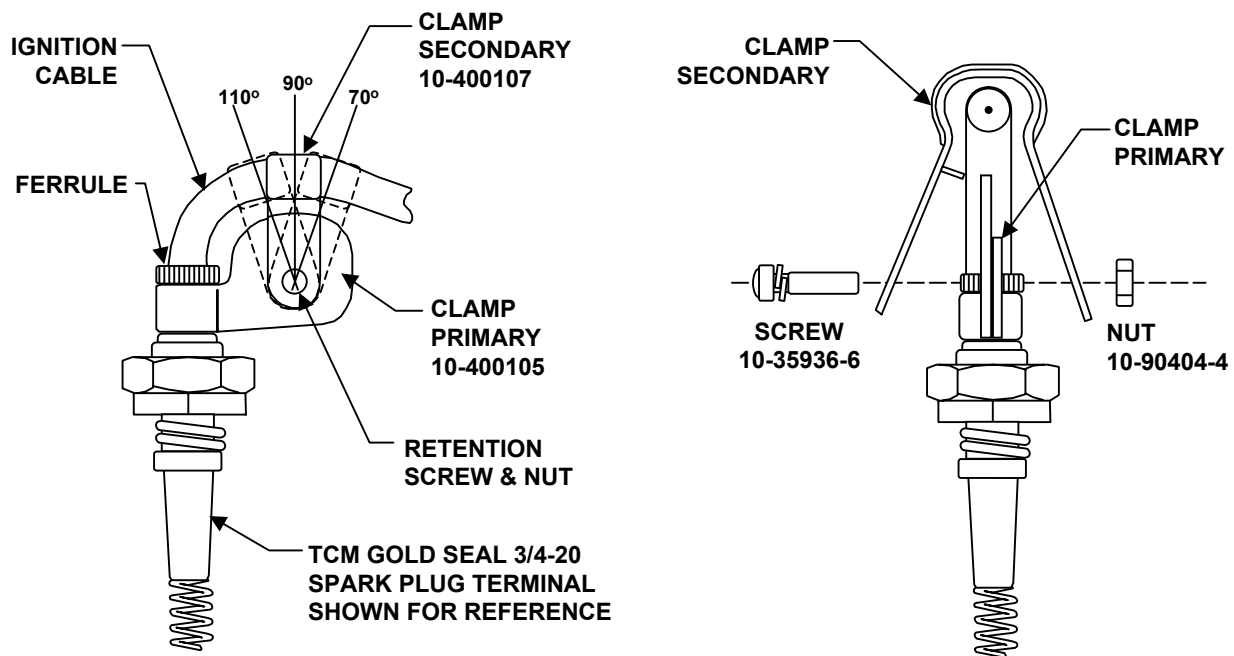
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FIGURE 7: ADJUSTABLE SPARK PLUG TERMINAL BEND CLAMP KIT

TCM's Gold Seal Adjustable Bend Clamp Kits are designed to replace bulky, expensive elbows on installations where positive lead location near the spark plug terminal is required. Some Gold Seal Harness assemblies are supplied with Bend Clamp Kits as bag parts. Bend clamp kits may be purchased separately for use on any TCM Gold Seal Harness, 5/8-24 or 3/4-20 terminals, as well as with Dura-Blue 5/8-24 terminals.

P/N: 10-400112-8 (8 ASSY'S FOR 4 CYL HARNESSES)
10-400112-12 (12 ASSY'S FOR 6 CYL HARNESSES)



INSTRUCTIONS FOR ASSEMBLY:

1. For proper orientation of finished assembly, harness should be assembled onto magneto, engine and spark plugs.
2. Install primary clamp over Ferrule oriented as shown in illustration; pinch closed.
3. Align toothed leg of secondary clamp with notched side of primary clamp. Install secondary clamp onto cable; pinch partially closed. (Clamp should still slide on cable.)
4. While holding primary clamp closed, position tooth of secondary clamp into desired angular position slot of primary clamp (see illustration); squeeze both clamps closed and align screw holes.

CAUTION: Insure that positioning tooth of secondary clamp is in one of the slots of primary clamp, otherwise tooth can be bent or broken, rendering secondary clamp unusable.

5. Insert retention screw through aligned holes of both clamps.
6. Install retention nut onto screw and, while insuring that both clamps are correctly positioned, tighten nut onto screw using torque of 15 to 20 LB-IN.