INSTALLATION INSTRUCTIONS

MAGNETO IGNITION SYSTEMS

SUPER-MAG® II
SUPER-MAG® III
SUPER-MAG® IV
SPRINTMAG®
SPRINTMAG® II
SPRINTMAG® III

INSTALLATION PROCEDURE FOR SINGLE AND DUAL IGNITION SYSTEMS

Step 1
Rotate the engine to top dead center (TDC), #1 cylinder on compression stroke. Remove the magneto cap. Position the magneto in the engine with the rotor pointed toward the desired #1 plug wire position. CAUTION: BE SURE THE MAGNETO IS FULLY SEATED. Set the distributor hold down clamp in place but do not tighten at this time.

SPRINTMAG®, SPRINTMAG® II and SPRINTMAG® III:
Be sure the magneto pointer aligns with (zero) on the timing plate on the generator. Also, be sure the band clamp is tight.

SUPER-MAG® II, III, AND IV, LEFT-HAND ROTATION:
Be sure the magneto pointer aligns with the left side edge of the timing plate on the generator. Also, be sure the band clamp is tight.

SUPER-MAG® II, III, AND IV, RIGHT-HAND ROTATION:
Be sure the magneto pointer aligns with the right-side edge of the timing plate on the generator. Also, be sure the band clamp is tight.

Step 2
Static Timing (TDC Method)
Connect the static timer (buzz box) to the generator (see Figures 1 and 2). Turn static timer ON. If the buzzer begins sounding, turn the magneto in either direction until the buzzer is silent.

LEFT-HAND ROTATION: While the buzzer is silent, hold the rotor clockwise and slowly turn the magneto counterclockwise. Stop turning the magneto when the buzzer begins sounding. Tighten the distributor hold-down clamp.

RIGHT-HAND ROTATION: While the buzzer is silent, hold the rotor counterclockwise and slowly turn the magneto clockwise. Stop turning the magneto when the buzzer begins sounding. Tighten the distributor hold-down clamp.

Step 3
Make a mark on the generator below the rotor. Install the magneto cap. The post on the magneto cap over the mark made on the generator is # 1 cylinder. Install the spark plug wires in the sequence of the firing order.

Step 4
SET TIMING. Loosen the band clamp.

SPRINTMAG® AND SPRINTMAG® II: Turn the generator to align the pointer and timing plate to the desired initial timing. Tighten the band clamp.

SPRINTMAG® III: Rotate crank hub to align with timing mark and pointer. Use static timing method to set timing. Recheck timing with timing light above 3500 RPM. By leaving the pointer on "0", the timing may be reset without the use of a timing light. To reset timing, loosen the band clamp and rotate the generator housing.

SUPER-MAG® II, III, IV: Turn the generator to align the pointer and timing plate to the desired initial timing. Each mark on the timing plate is 2 degrees. Tighten the band clamp.

NOTE: Timing may be checked with most timing lights after installation is completed.

Step 5
WIRING PROCEDURE
Connect long harness to the generator. Refer to WIRING DIAGRAMS on pages 2 and 3 for all additional wiring.

GENERAL INFORMATION

- Closely monitor spark plugs and spark plug gaps for maximum performance. Set spark plug gaps at .018" to .022".
- 16AWG/600V or larger wire must be used on all additional wiring. All grounds must be made to the engine block. Do not ground to chassis or anodized surfaces.

WARNING

- *A KILL SWITCH MUST BE USED TO STOP THE ENGINE FROM RUNNING.*
- *NEVER CONNECT ANY PART OF THIS IGNITION TO 12 VOLTS.*
- *Disconnect and remove generator before arc welding on the vehicle.*
- *On dual ignition systems, each ignition system must run independent of the other.*
- *To prevent internal damage to transformers, the transformer must be mounted with the high tension lead coming from the bottom and positioned no closer than 2.5" from the nearest metal surface.*

SPRINTMAG AND SPRINTMAG II MAGNETO STARTING TIP

A magneto normally requires good crankshaft speed to produce enough ignition output to start the engine. When the magneto is hot, higher crankshaft speeds are required. The Mallory Magneto Start Assist Box is designed to electronically connect the magneto system to the engine's starter solenoid. During starting, the Magneto Start Assist Box "boosts" the magneto output, creating a strong starting spark even at very low cranking RPM. IMPORTANT: The magneto must be modified at the factory before it can be used with the Magneto Start Assist Box. Ship your magneto to:

Prestolite Performance
10601 Memphis Ave. #12
Cleveland, OH 44144

FIGURE 1

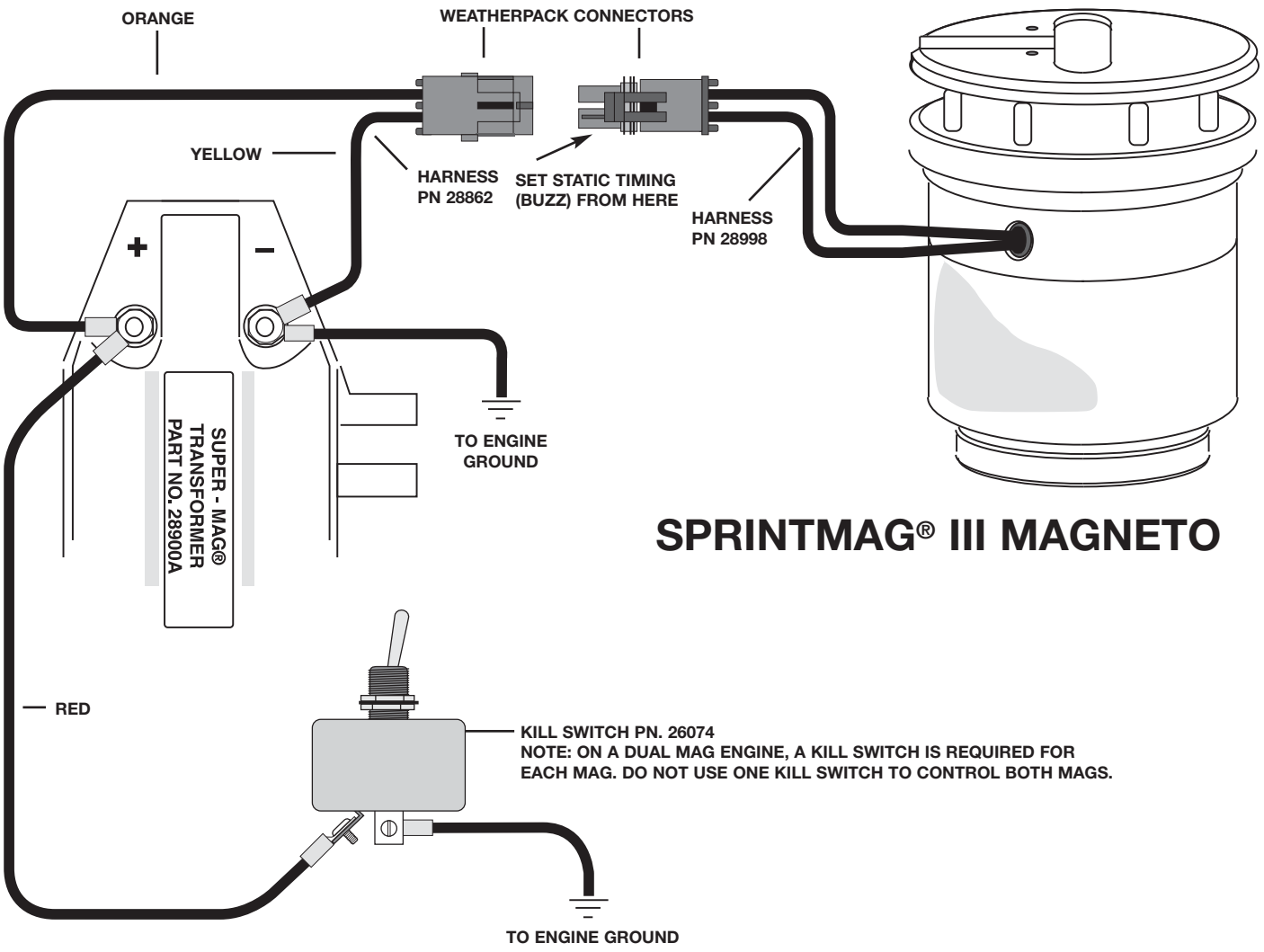
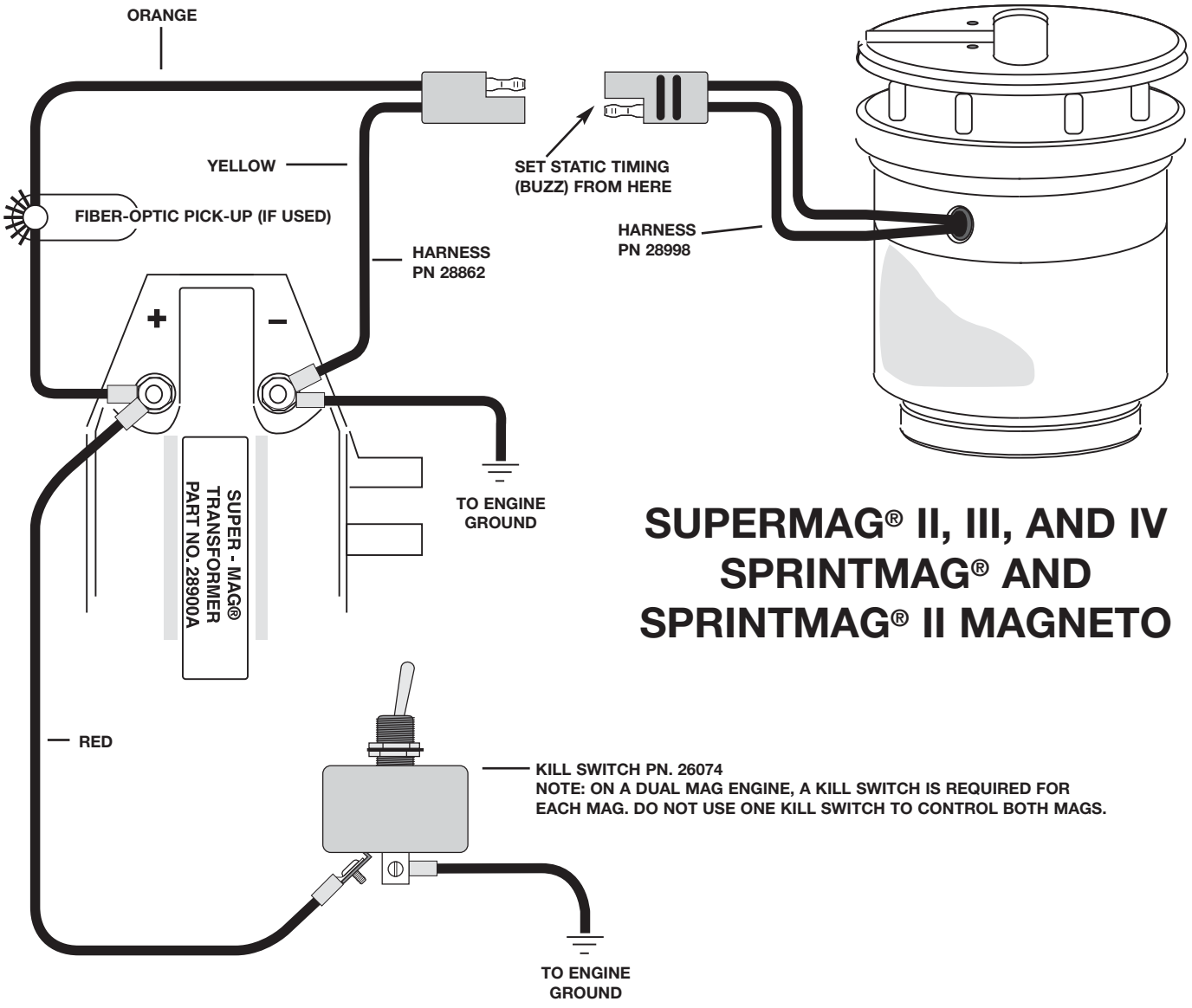


FIGURE 2



SUPERMAG® II, III, AND IV
SPRINTMAG® AND
SPRINTMAG® II MAGNETO

GENERATOR APPLICATIONS

DISTRIBUTOR CAP STYLE AND DESCRIPTION	SUPER-MAG® IV PART NO.	SUPER-MAG® III PART NO.	SPRINTMAG® II PART NO.	SPRINTMAG® PART NO.	SPRINTMAG® III PART NO.
RH 8-cyl Stack Cap	29164	29160	29230	29166	—
LH 8-cyl Stack Cap	29174	29170	29231	29167	—
RH 8-cyl Pro Cap	29164-3	29160-3	29228	—	29238
LH 8-cyl Pro Cap	29174-3	29170-3	29229	—	29239
RH 8-cyl Large Flat Cap	29164-1	29160-1	—	—	—
LH 8-cyl Large Flat Cap	29174-1	29170-1	—	—	—
RH 8-cyl Flat Cap	—	—	—	29162	—
LH 8-cyl Flat Cap	—	—	—	29163	—
RH 8-cyl 208 Cap (HEI Style)	—	—	—	—	29236
LH 8-cyl 208 Cap (HEI Style)	—	—	—	—	29237
RH 4-cyl Stack Cap	29144	29161	29234	29168	—
LH 4-cyl Stack Cap	29154	29171	29235	29169	—
RH 4-cyl Pro Cap	29144-3	29161-3	29232	—	—
LH 4-cyl Pro Cap	29154-3	29171-3	29233	—	—

SERVICE PARTS

DESCRIPTION		PART NO.
Transformer		28900A
Transformer Bracket (replacement)		29190
Wire Harness (orange/yellow)	Long	28862
Wire Harness (orange/yellow)	Short	28998
Kill Switch (single magneto ignition)		26072
Kill Switch (dual magneto ignition)		26073
Kill Switch for SPRINTMAG®, SPRINTMAG® II and III		26074
Replacement Contact Block for Kill Switch PN 29072 and 26073		26076
Wire Harness for SPRINTMAG® III (weatherpack)	Long	28861
Wire Harness for SPRINTMAG® III (weatherpack)	Short	28860
Drive Flange for SPRINTMAG® and SPRINTMAG® II	2-Pin	26007A
Drive Flange for all SUPERMAG®	4-Pin	26007B
Drive Flange for SPRINTMAG® III		26007C
Lock-Out (Spider) for SPRINTMAG® III		29073
Advance Lock-Out for 2 or 4 Pin Drive Flange		28103A
Band Clamp		26041A
Band Clamp (small)		26041B
Static Timer		28355

TUNE-UP PARTS

DESCRIPTION	PART NO.
Contact Point — All (gap .016")	25758M
Condensor — All SPRINTMAG Magnetos	28005A
Condensor — SUPERMAG® II	28005A
Condensor — SUPERMAG® III, IV	28005
Adapter/Shield for Pro Cap	29749
Rotor Adapter for Pro Cap	29038
Wire Retainer for Pro Cap	29744

DISTRIBUTOR CAP STYLE/DESCRIPTION	DIST. CAP PART NO.	ROTOR PART NO. RH	ROTOR PART NO. LH	CAP ADAPTER/CONVERSION KIT DESCRIPTION	KIT PART NO. RH	KIT PART NO. LH
SUPERMAG® II, III, AND IV MAGNETOS						
8-cyl Stack Cap	205	28995	28995A			
8-cyl Large Flat Cap	28709	29030	29031	Large Flat Cap Conversion Kit 29374	29375	
8-cyl Pro Cap	29745	29772M	29773M	Pro Cap Conversion Kit	29771	29774
Replacement Rotor w/Adapter Screw-Together	—	29772C	29773C			
4-cyl (8 lobe breaker point cam) Stack Cap, RH	256	28995	—		—	—
4-cyl (8 lobe breaker point cam) Stack Cap, LH	257	—	28995A		—	—
4-cyl (4 lobe breaker point cam) Stack Cap	207	28995	28995A		—	—
4-cyl (4 lobe breaker point cam) Pro Cap	29741	29772M	29773M		—	—
SPRINT-MAG® MAGNETO						
8-cyl Stack Cap	204	28995	28995A		—	—
8-cyl Flat Cap	221F	28995	28995A	Flat Cap Conversion Kit 29383	29383	
4-cyl Stack Cap	206	28995	28995A		—	—
SPRINT-MAG® II MAGNETO						
8-cyl Stack Cap	205	28995	28995A		—	—
8-cyl Pro Cap	29745	29772C	29773C	Pro Cap Conversion Kit 29771	29774	
4-cyl Stack Cap	207	28995	28995A		—	—
4-cyl Pro Cap	29741	29772C	29773C		—	—
SPRINT-MAG® III MAGNETO						
8-cyl 208 Cap (HEI Style)	208	29340*	—	Two Piece	—	—
8-cyl 208 Cap (HEI Style)	208	28995	28995A	One Piece after 7/99	—	—
8-cyl Pro Cap	29745	29772C	29773C		29771	29774

prestolite PERFORMANCE
MALLORY IS A DIVISION OF PRESTOLITE PERFORMANCE
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