

HAP ALZINA

3074 BROADWAY
Oakland 11, California, U.S.A.

IMPORTERS
WESTERN UNITED STATES

Direct Lighting Set for Scramblers

AND ROAD MODELS

BSA

MOTORCYCLES

With this equipment and instructions you can install Direct Lighting on Spitfire, Catalina, Alloy Clipper models. Also applicable to any road model with Lucas D.C. equipment.

LEGAL REQUIREMENTS: Check your local legal requirements on automotive lighting before installing a direct lighting set, as no battery is used and lights burn only when motor is running.

GEARING FOR ROAD RUNNING: Scrambles gearing is too low for extended road running. If machine is to be used on the road regularly, the gearing must be changed to standard road ratio. See Bulletin.

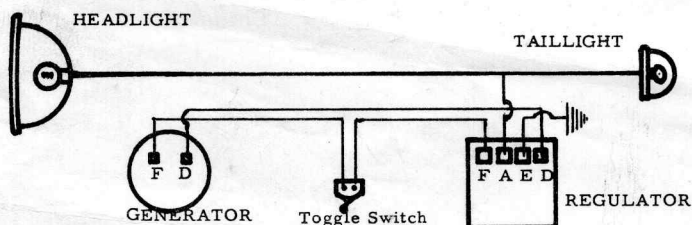
DIRECT LIGHTING CAN BE INSTALLED ON A-10 SPITFIRE SCRAMBLERS, B-34 GOLD STAR CATALINA SCRAMBLERS, B-34 ALLOY CLIPPERS, AND ON ANY ROAD MODELS ON WHICH IT IS DESIRED TO RUN WITHOUT A BATTERY, BY FOLLOWING THE WIRING AND PARTS DIAGRAMS SHOWN BELOW. IN THE CASE OF THE CATALINA AND CLIPPER MODELS IT IS NECESSARY TO REPLACE THE PRESENT MAGNETO WITH A MAGDYN. ON THE "A" MODELS, ADDING A GENERATOR WILL SUFFICE. MOUNTING INSTRUCTIONS FOR THE MAGDYNOS ARE GIVEN IN BSA SERVICE SHEET NO. 305. FOR "A" MODEL GENERATORS SEE SERVICE SHEET NO. 208. REMAINDER OF WIRING HOOKUP AND PARTS REQUIRED ARE SHOWN BELOW.

TYPE NO. 1

SINGLE BEAM HEADLIGHT AND TAILLIGHT

PARTS REQUIRED:

- | | |
|--------------|---|
| 1 BA-502 | HEADLIGHT "A & B" MODELS |
| 1 BA-503 | HEADLIGHT BRKT. "A & B" MODELS |
| 1 67-727 | GENERATOR SPROCKET "A" MODELS |
| 1 110500/522 | GENERATOR CHAIN "A" MODELS |
| 1 67-1876 | GENERATOR STRAP "A" MODELS |
| 2 67-353 | GENERATOR STUD "A" MODELS |
| 1 29-2203 | GENERATOR EYE BOLT "A" MODELS |
| 1 2-833 | GENERATOR EYE BOLT NUT MODELS |
| 1 29-4662 | EYE BOLT WASHER "A & B" MODELS |
| 1 65-2352 | GENERATOR STRAP PLUG "A & B" MODELS |
| 1 20036 | GENERATOR "A" MODELS |
| 1 46043 | MAGDYN "B" MODELS |
| 1 BA504 | TOGGLE SWITCH "A & B" MODELS |
| 1 37127 | VOLTAGE REGULATOR "A & B" MODELS |
| 1 BA506 | REGULATOR & SWITCH BRKT. "A & B" MODELS |
| 1 65-1427 | GENERATOR STRAP (LONG) "B" MODELS |
| 1 29-4661 | GENERATOR STRAP BOLT "B" MODELS |
| 1 200380 | GENERATOR PACKING WASHER "A" MODELS |
| 1 850641 | CONNECTOR |
| 4 900269 | TERMINALS |
| 1 BA505 | TAILLIGHT "A & B" MODELS |
| 1 | LENGTH AUTOMOTIVE WIRE |

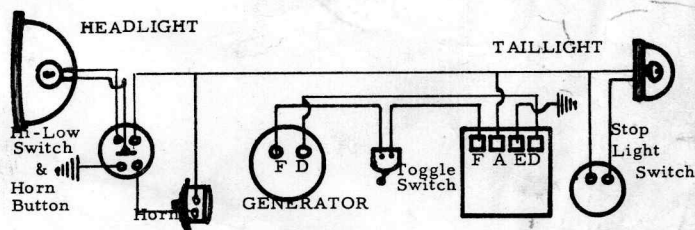


TYPE NO. 2

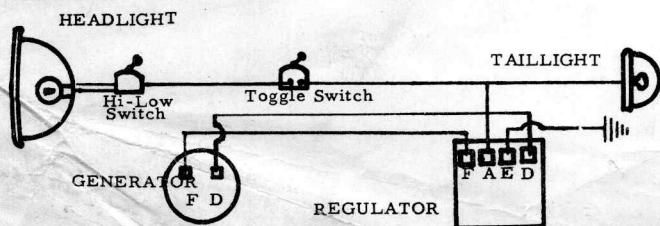
HI-LOW HEADLIGHT, TAILLIGHT, STOPLIGHT AND HORN

PARTS REQUIRED:

- | | |
|-----------|---|
| 1 BA502 | HEADLIGHT "A & B" MODELS |
| 1 BA503 | HEADLIGHT BRACKET "A & B" MODELS |
| 1 31220 | DIPPER SWITCH "A & B" MODELS |
| 1 20036 | GENERATOR "A" MODELS |
| 1 46043 | MAGDYN "B" MODELS |
| 1 37127 | REGULATOR "A & B" MODELS |
| 1 BA506 | VOLTAGE REG. & SWITCH BRKT. "A & B" MODELS. |
| 1 BA507 | TOGGLE SWITCH "A & B" MODELS |
| 1 67-727 | GEN. SPROCKET "A" MODELS |
| 1 67-297 | GEN. CHAIN "A" MODELS |
| 1 65-1427 | GEN. STRAP (LONG) "B" MODELS |
| 1 29-4661 | GEN. STRAP BOLT "B" MODELS |
| 1 67-1876 | GEN. STRAP "A" MODELS |
| 2 67-353 | GEN. STUD "A" MODELS |
| 1 29-2203 | GEN. EYE BOLT "A & B" MODELS |
| 1 2-833 | GEN. EYE BOLT NUT "A & B" MODELS |
| 1 29-4662 | GEN. EYE BOLT NUT WASHER "A & B" MODELS |
| 1 65-2352 | GEN. PLUG STRAP "A & B" MODELS |
| 1 65-2353 | GEN. STRAP EYE PLUG (TAPPED) "B" MODELS |
| 1 31281 | S/L SWITCH "A & B" MODELS |
| 1 315543 | SWITCH SPRING "A & B" MODELS |
| 1 42-9027 | SWITCH SPRING LINK "A & B" MODELS |
| 3 850641 | CONNECTORS "A & B" MODELS |
| 11 900269 | TERMINALS "A & B" MODELS |
| 1 BA505 | TAILLIGHT "A & B" MODELS |
| 1 | ROLL AUTOMOTIVE WIRE "A & B" MODELS |



SOME INSTALLATIONS ARE PERMANENTLY WIRED INTO THE TAILLIGHT BY RUNNING A WIRE DIRECT FROM THE HOT SIDE OF THE TOGGLE SWITCH TO THE TAILLIGHT, KEEPING THE TAILLAMP BURNING CONTINUOUSLY. THE PURPOSE OF THIS BEING TO KEEP THE COMMUTATOR CLEAN BY CONSUMING THE GENERATOR CURRENT. IN SOME INSTANCES EXPERIENCE WITH DIRECT LIGHTING HAS INDICATED THAT LONG PERIODS OF OPERATION WITHOUT USING THE LIGHTS TENDS TO ALLOW THE BRUSHES TO "RIDE" THE COMMUTATOR AND DEPOSIT BRUSH WIPINGS THAT "DIRTY" THE COMMUTATOR AND THEN WHEN LIGHTS ARE REQUIRED, NO CURRENT RESULTS UNTIL THE COMMUTATOR HAS BEEN WIPED CLEAN. CONTINUOUS TAILLIGHT OPERATION SEEMS TO ALLAY THIS CONDITION AND MAKES THE LIGHTING CURRENT INSTANTLY AVAILABLE. ALTERNATE WIRING DIAGRAM FOR THIS TYPE OF HOOKUP IS SHOWN BELOW.



ON SOME INSTALLATIONS OWNERS CLOSE THE CUTOUT IN THE REGULATOR BY BENDING DOWN THE STOP ARM UNTIL IT FIXES THE POINTS IN A CLOSED POSITION. THE POINTS ARE THEN SOLDERED ACROSS TO EFFECT A PERMANENTLY CLOSED POSITION OF GOOD CONTACT. THE REASON BEHIND THIS VARIATION IN DIRECT LIGHTING IS TO INSURE SOME MEASURE OF LIGHTING AT LOW ENGINE RPM. ORDINARILY THE CUTOUT POINTS OPEN WHEN THE VOLTAGE DROPS TO ABOUT 4 1/2 - 5 VOLTS AND THE LIGHTS IMMEDIATELY CUT OFF.

BY CLOSING THE CIRCUIT SOME MEASURE OF LIGHTING IS AVAILABLE DOWN TO MINIMUM RPM AND THE RETURN OF VOLTAGE IS EFFECTED IMMEDIATELY THE THROTTLE IS SLIGHTLY OPENED.

No responsibility is assumed in supplying these direct lighting instructions. It shall be the responsibility of the dealer to see that such installations comply with the laws of his state.

