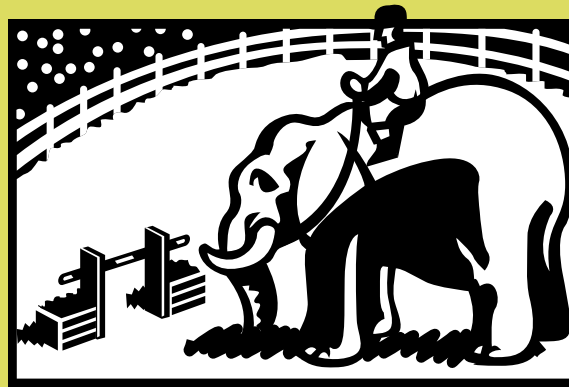H-D WIRING
MADE ~~EASY~~
E A S I E R

jump boy, jump

THE DUMB WIRING BOOK

About This Book

This project started when I rebuilt a wrecked Shovel in the early '80's. The factory wiring schematic was helpful but hard to read and not real durable.

My solution was to lay out several sheets of tracing paper on the kitchen table, then sketch out an as-built drawing that was big enough to see and easy to understand. It worked fine then, but lacked portability.

Now those originals have been cleaned up, revised, and converted to Acrobat digital format — viewable on any platform, prints on any printer, easy enough for anyone to follow, and provides enough wiring basics for just about any project.

AMP Connectors

The toughest thing about wiring an AMP socket is pin spacing, especially with larger sockets. The pin numbering's next to invisible, soldering's difficult, and you've got to make sure the numbers match - 1 to 1, 2 to 2, etc. But once installed, these connections are a foolproof and tidy project.

Connections require two connectors; a male and a female socket. There's a big range of pin capacities, and there are

designs for use in bulkheads. (Note: these aren't push on-pull off friction fit, spade-type, or pin-lock, but full lock ring connectors designed to be plugged and unplugged repeatedly.)

The pin tool is an absolute necessity for creating and repairing connections. Trying to remove pins without the tool is guaranteed to wreck both your day and your components. And remember the dielectric grease for coating finished connections.
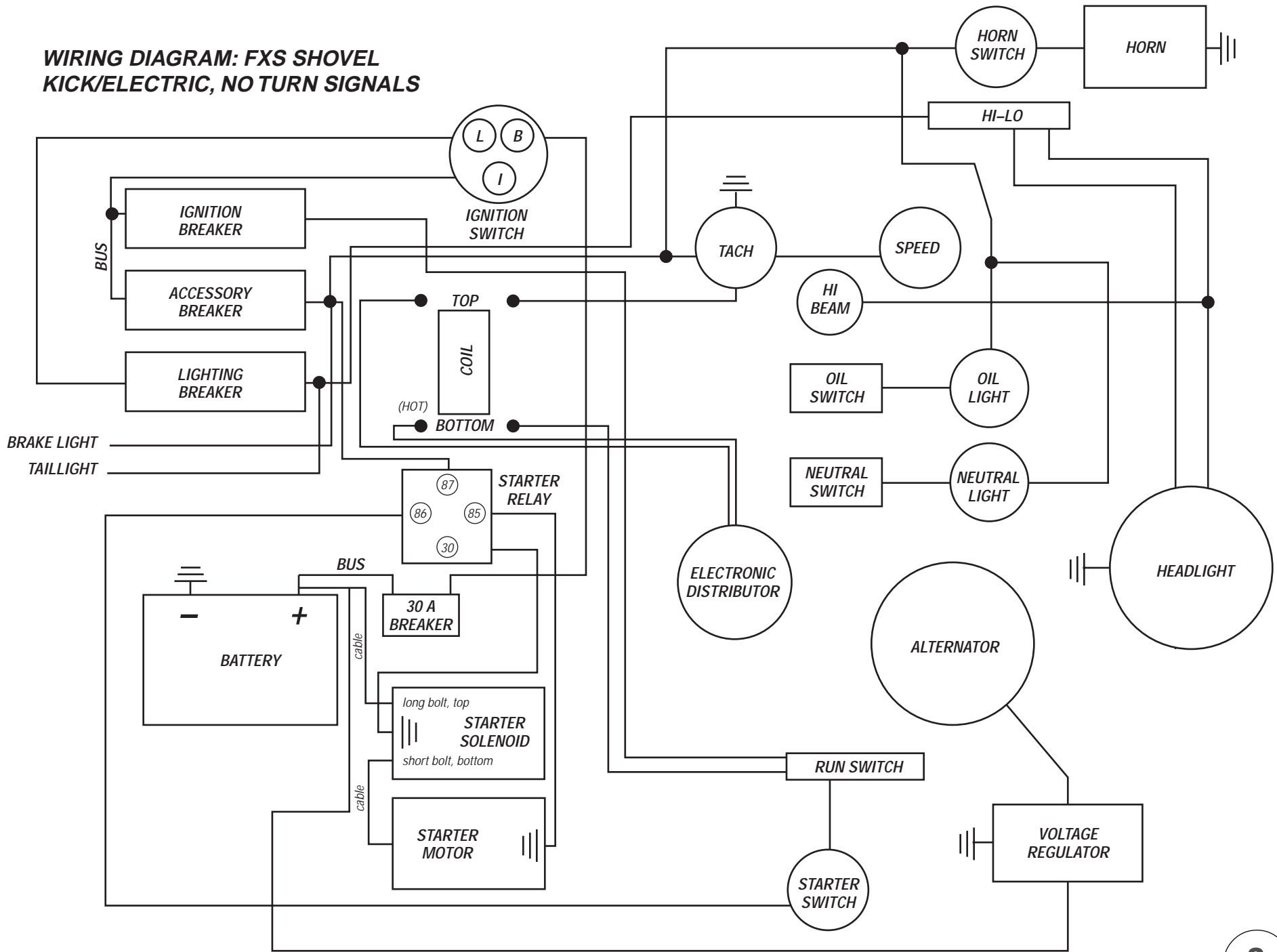
Relay Testing

The relay testing schematic is useful for any number of applications, including your starter wiring. These seldom go bad. Most problems are simply the result of bad connections.

WIRING DIAGRAM: FXS SHOVEL KICK/ELECTRIC, NO TURN SIGNALS

HORN SWITCH

HORN

HI–LO

L B I

IGNITION SWITCH

BUS

IGNITION BREAKER

ACCESSORY BREAKER

LIGHTING BREAKER

TACH

SPEED

HI BEAM

OIL SWITCH

OIL LIGHT

NEUTRAL SWITCH

NEUTRAL LIGHT

TOP

COIL

(HOT)

BOTTOM

BRAKE LIGHT

TAILLIGHT

STARTER RELAY

87

86 85

30

BUS

BATTERY

30 A BREAKER

cable

long bolt, top

STARTER SOLENOID

short bolt, bottom

cable

STARTER MOTOR

ELECTRONIC DISTRIBUTOR

HEADLIGHT

ALTERNATOR

RUN SWITCH

STARTER SWITCH

VOLTAGE REGULATOR

3

WIRING DIAGRAM: 1980 FXS
9 PIN AMP CONNECTOR

HORN SWITCH

HI-LO SWITCH

8 ← LIGHT BREAKER   BE   BE

7 ← ACCESSORY BREAKER   O   O

6 ← HORN   TN   BK

W   Y

BK

OIL LIGHT

5 ← OIL PRESSURE SWITCH   GN   BK

HEADLIGHT

9 ← HI BEAM LIGHT   BK   PK   W   W

BK

BK

NEUTRAL LIGHT

4 ← NEUTRAL SWITCH   Y   BK

3 ← COIL   W   W   W

2 ← IGNITION BREAKER   GY   GN   GY

1 ← STARTER RELAY   BK   BK   BK   W

MALE

FEMALE

STARTER SWITCH

RUN-OFF SWITCH

4
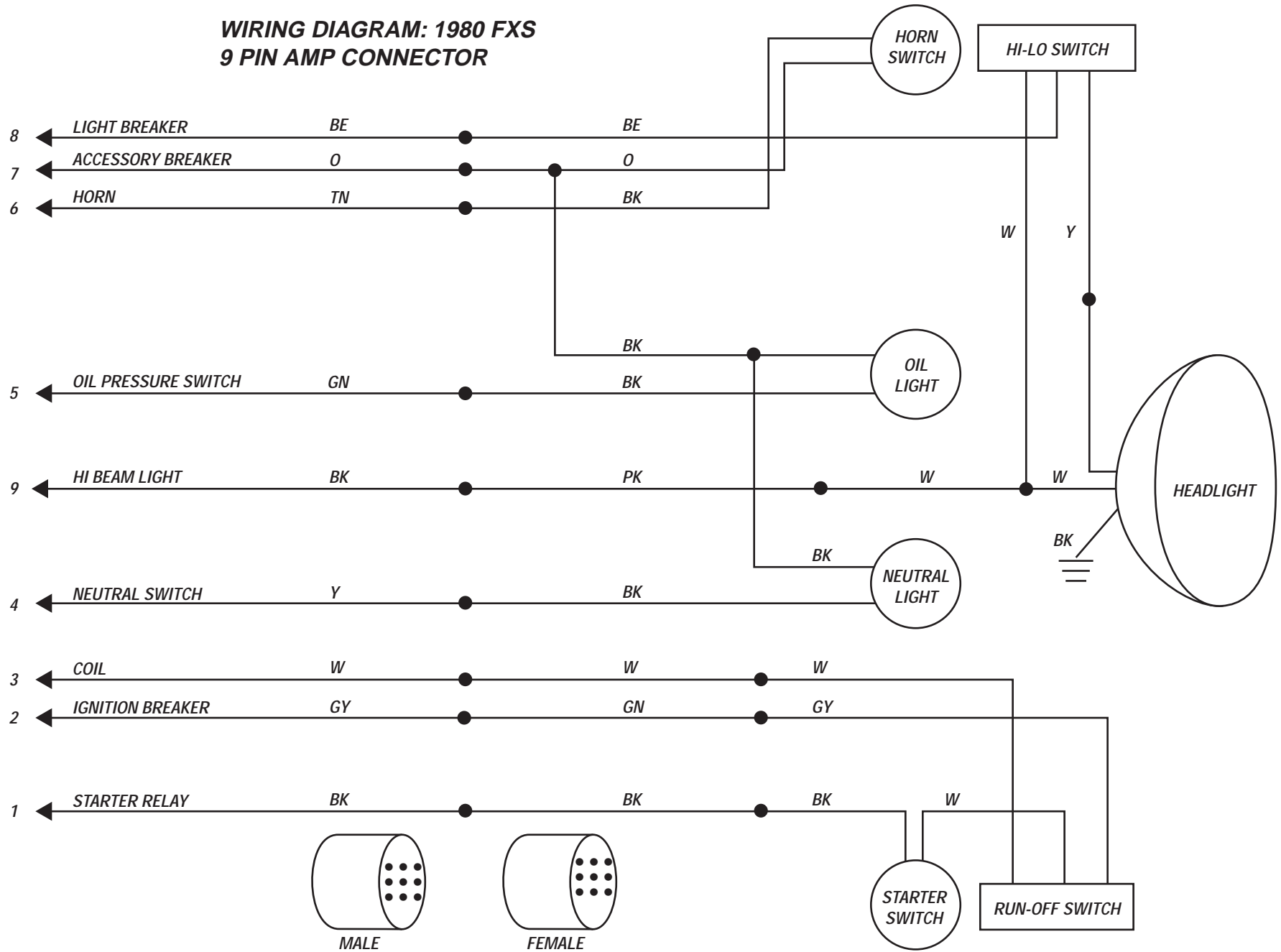
**WIRING DIAGRAM: 1980 FXS
TACHOMETER/SPEEDOMETER
(3.5 GALLON FAT BOBS)**

LIGHT

SPEEDOMETER

GRN   BLK

TACHOMETER

LIGHT

BLK

ORANGE 12V   YLW   (TO COIL TRIGGER)
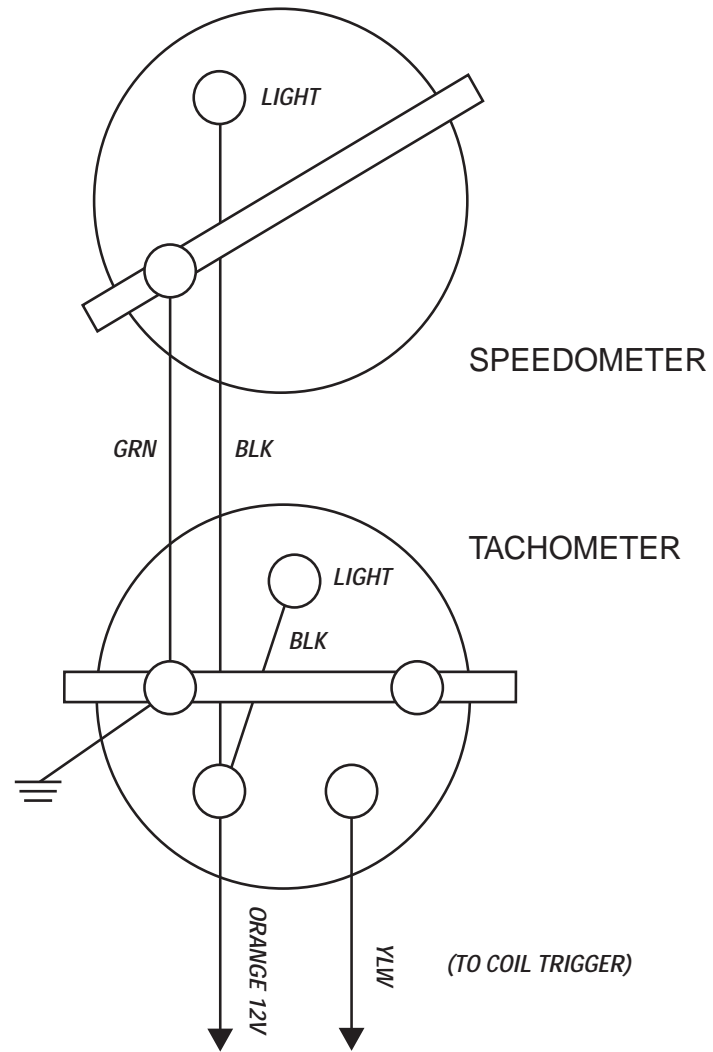
STARTER RELAY INSTALL
*1 FX to ACC/IGN BREAKER
*2 FL to BATTERY

87

*1
*2

STARTER SWITCH → 86   87   85 ← GROUND (STARTER)

30 | STARTER SOLENOID

85   87

86   30

STARTER RELAY TEST

87
POSITIVE

TEST SWITCH → 86   85 ← GROUND

87

30

+ 12V -

TEST BULB