



# 2015 Harley-Davidson Softail Models Service Manual

©2014 H-D.  
ALL RIGHTS RESERVED  
99482-15

Printed in the U.S.A.

VISIT THE HARLEY-DAVIDSON WEB SITE  
<http://www.harley-davidson.com>

## MAINTENANCE

### 1.1 FASTENER TORQUE VALUES

Fastener Torque Values in this Chapter.....	1-1
---	-----

### 1.2 GENERAL

Servicing a New Motorcycle.....	1-3
Safe Operating Maintenance.....	1-3
Disposal and Recycling.....	1-3
Shop Practices.....	1-3
Repair Notes.....	1-3
Safety.....	1-3
Removing Parts.....	1-3
Cleaning.....	1-3
Disassembly and Assembly.....	1-4
Checking Torques on Fasteners.....	1-4
Magnetic Parts Trays.....	1-4
Repair and Replacement Procedures.....	1-4
Hardware and Threaded Parts.....	1-4
Threadlocking Agents.....	1-4
Wiring, Hoses and Lines.....	1-4
Instruments and Gauges.....	1-4
Bearings.....	1-4
Bushings.....	1-4
Gaskets.....	1-4
Lip-Type Seals.....	1-4
O-Rings.....	1-5
Gears.....	1-5
Shafts.....	1-5
Part Replacement.....	1-5
Cleaning.....	1-5
Protecting Rubber Parts.....	1-5
Cleaning Process.....	1-5
Rust or Corrosion Removal.....	1-5
Bearings.....	1-5
Tool Safety.....	1-5
Air Tools.....	1-5
Wrenches.....	1-5
Pliers/Cutters/Pry Bars.....	1-5
Hammers.....	1-6
Punches/Chisels.....	1-6
Screwdrivers.....	1-6
Ratchets and Handles.....	1-6
Sockets.....	1-6
Storage Units.....	1-6

### 1.3 FUEL AND OIL

Fuel.....	1-7
Gasoline Blends.....	1-7
Engine Lubrication.....	1-7
Winter Lubrication.....	1-8

### 1.4 BULB REQUIREMENTS

General.....	1-9
--------------	-----

### 1.5 MAINTENANCE SCHEDULE

General.....	1-10
--------------	------

### 1.6 ENGINE OIL AND FILTER

Checking and Adding Oil.....	1-15
Changing Oil and Filter.....	1-15

### 1.7 AIR CLEANER AND EXHAUST SYSTEM

Removal.....	1-17
Cleaning and Inspection.....	1-17

Installation.....	1-18
Exhaust System Leak Check.....	1-19
Exhaust System Leakage.....	1-19

### 1.8 TIRES AND WHEELS

General.....	1-20
Tires.....	1-20
Tire Replacement.....	1-21
Inspection.....	1-21
When To Replace Tires.....	1-21
Wheel Bearings.....	1-21
Wheel Spokes.....	1-21
Identify Wheel Spoke Groups.....	1-22
Wheel Spoke Adjustment.....	1-22

### 1.9 PRIMARY CHAINCASE LUBRICANT

General.....	1-23
Changing Primary Chaincase Lubricant.....	1-23

### 1.10 TRANSMISSION LUBRICANT

Checking Transmission Lubricant.....	1-25
Changing Transmission Lubricant.....	1-25

### 1.11 CLUTCH

Adjustment.....	1-27
-----------------	------

### 1.12 DRIVE BELT AND SPROCKETS

General.....	1-29
Cleaning.....	1-29
Inspection.....	1-29
Sprockets.....	1-29
Drive Belt.....	1-29
Checking Drive Belt Deflection.....	1-30
Adjusting Belt Deflection.....	1-32

### 1.13 THROTTLE CABLES

Cable Inspection, Lubrication and Adjustment.....	1-33
Inspection and Lubrication.....	1-33
Adjustment.....	1-33

### 1.14 CABLE AND CHASSIS LUBRICATION

General.....	1-35
Cables and Hand Levers.....	1-35
Jiffy Stand.....	1-35
Steering Head Bearings.....	1-35

### 1.15 BRAKES

Fluid Inspection.....	1-36
Rear Brake Pedal.....	1-36
Pedal Height.....	1-36
Pedal Lubrication.....	1-36
Pedal Pad.....	1-36
Brake Lines Inspection.....	1-37

### 1.16 BRAKE PADS AND DISCS

Inspection.....	1-38
Brake Pads.....	1-38
Brake Disc.....	1-38
Brake Pad Replacement.....	1-38
Rear Brake Caliper.....	1-38
Front Brake Caliper.....	1-40

### 1.17 SPARK PLUGS

Removal.....	1-42
Inspection.....	1-42

# TABLE OF CONTENTS

Cleaning.....	1-42	Alternator Charge Rate Is Below Normal.....	1-60		
Installation.....	1-42	Speedometer Operates Erratically.....	1-60		
Spark Plug Cable Inspection.....	1-43	Transmission.....	1-60		
<b>1.18 STEERING HEAD BEARINGS</b>					
Adjustment: FLSTC, FLSTF/B, FLSTN, FLS.....	1-44	Shifts Hard.....	1-60		
Bearing Adjustment (Fall-away).....	1-44	Jumps Out Of Gear.....	1-60		
Adjustment: FXST.....	1-45	Clutch Slips.....	1-60		
Bearing Adjustment (Fall-away).....	1-45	Clutch Drags Or Does Not Release.....	1-60		
Adjustment: FXSB.....	1-46	Clutch Chatters.....	1-60		
Bearing Adjustment (Fall-away).....	1-46	Handling.....	1-60		
Lubrication.....	1-47	Irregularities.....	1-60		
<b>1.19 BATTERY MAINTENANCE</b>					
General.....	1-48	Brakes.....	1-60		
Cleaning and Inspection.....	1-49	Brake Does Not Hold Normally.....	1-60		
Voltmeter Test.....	1-49	<b>CHASSIS</b>			
Charging Battery.....	1-49	<b>2.1 FASTENER TORQUE VALUES</b>			
Safety Precautions.....	1-49	Fastener Torque Values in this Chapter.....			
Using a Battery Charger.....	1-49	2-1			
Battery Disconnection and Removal.....	1-50	<b>2.2 SPECIFICATIONS</b>			
Storage.....	1-50	Specifications.....	2-5		
Battery Installation and Connection.....	1-51	Chassis Specifications.....	2-5		
<b>1.20 HEADLAMP ALIGNMENT</b>					
Headlamp Alignment.....	1-53	Tire Specifications.....	2-6		
Headlamp Adjustment.....	1-53	<b>2.3 VEHICLE IDENTIFICATION NUMBER (V.I.N.)</b>			
Vehicle Identification Number.....				2-9	
<b>1.21 SUSPENSION ADJUSTMENTS</b>					
Shock Absorbers.....	1-55	<b>2.4 FRONT WHEEL</b>			
Calculate Number of Turns.....	1-55	Removal.....	2-11		
Adjustment.....	1-55	Disassembly.....	2-11		
<b>1.22 STORAGE</b>					
General.....	1-56	Disc Wheel.....	2-11		
Placing in Storage.....	1-56	Laced Wheel.....	2-11		
Removal from Storage.....	1-56	Cleaning and Inspection.....	2-13		
<b>1.23 TROUBLESHOOTING</b>					
General.....	1-58	Assembly.....	2-13		
Engine.....	1-58	Disc Wheel.....	2-13		
Starter Motor Does Not Operate or Does Not Turn Engine Over .....	1-58	Laced Wheel.....	2-14		
Engine Turns Over But Does Not Start .....	1-58	Installation.....	2-14		
Starts Hard.....	1-58	<b>2.5 REAR WHEEL</b>			
Starts But Runs Irregularly or Misses .....	1-58	Removal.....	2-15		
A Spark Plug Fouls Repeatedly.....	1-59	Disassembly.....	2-15		
Pre-Ignition or Detonation (Knocks or Pings).....	1-59	Cleaning and Inspection.....	2-16		
Overheating.....	1-59	Assembly.....	2-16		
Valve Train Noise.....	1-59	Installation.....	2-17		
Excessive Vibration.....	1-59	<b>2.6 WHEEL LACING</b>			
Check Engine Light Illuminates During Operation.....	1-59	Wheel Lacing: Angle Flange Hub.....	2-18		
Lubrication System.....	1-59	<b>2.7 CHECKING AND TRUING WHEELS</b>			
Oil Does Not Return To Oil Tank.....	1-59	General.....	2-20		
Engine Uses Too Much Oil Or Smokes Excessively.....	1-59	Checking Wheel Runout.....	2-20		
Engine Leaks Oil From Cases, Pushrods, Hoses, Etc.....	1-59	Checking Radial Runout.....	2-20		
Low Oil Pressure.....	1-60	Checking Lateral Runout.....	2-20		
High Oil Pressure.....	1-60	Laced Wheel Rim Offset.....	2-21		
Electrical System.....	1-60	Truing Laced Wheels.....	2-23		
Alternator Does Not Charge.....	1-60	Radial Runout.....	2-23		
		Lateral Runout.....	2-23		
<b>2.8 SEALED WHEEL BEARINGS</b>					
Inspection.....		Inspection.....	2-25		

# TABLE OF CONTENTS

Removal.....	2-25	Rear HCU to Rear Brake Caliper.....	2-56
Installation.....	2-27	Removal.....	2-56
<b>2.9 TIRES</b>		Installation.....	2-56
General.....	2-29		
Removal.....	2-29		
Cleaning, Inspection and Repair.....	2-29		
Installation.....	2-30		
Tube Type Tires.....	2-30		
Tubeless Tires: Cast Wheels.....	2-30		
Checking Tire Runout.....	2-31		
Lateral Runout.....	2-31		
Radial Runout.....	2-31		
Wheel Balancing.....	2-31		
Static vs Dynamic.....	2-31		
Weights.....	2-31		
<b>2.10 VEHICLE ALIGNMENT</b>			
Axe Alignment.....	2-33	Front Hydraulic Control Unit (HCU).....	2-60
Checking Axe Alignment.....	2-33	Removal.....	2-60
Adjusting Axe Alignment.....	2-34	Installation.....	2-60
<b>2.11 FRONT BRAKE MASTER CYLINDER</b>		Rear Hydraulic Control Unit (HCU).....	2-61
General.....	2-35	Removal.....	2-61
Removal and Disassembly.....	2-35	Installation.....	2-61
Cleaning and Inspection.....	2-36		
Assembly and Installation.....	2-36		
<b>2.12 FRONT BRAKE CALIPER</b>			
Removal.....	2-38		
Disassembly.....	2-38		
Cleaning, Inspection and Repair.....	2-39		
Assembly.....	2-40		
Installation.....	2-40		
<b>2.13 REAR BRAKE MASTER CYLINDER</b>			
General.....	2-41		
Removal.....	2-41		
Disassembly.....	2-41		
Cleaning and Inspection.....	2-42		
Assembly.....	2-42		
Installation.....	2-43		
<b>2.14 REAR BRAKE CALIPER</b>			
Removal.....	2-47		
Disassembly.....	2-47		
Cleaning, Inspection and Repair.....	2-49		
Assembly.....	2-49		
Rear Brake Line Routing.....	2-50		
Installation.....	2-50		
<b>2.15 BRAKE LINES</b>			
Front Master Cylinder to Front HCU.....	2-52		
Removal.....	2-52		
Installation.....	2-52		
HCU to Front Brake Caliper.....	2-53		
Removal.....	2-53		
Installation.....	2-53		
Rear Master Cylinder to Rear HCU.....	2-54		
Removal.....	2-54		
Installation.....	2-55		
<b>2.16 ABS: ELECTRONIC CONTROL UNIT (ECU)</b>			
Removal: All But FXSB.....	2-58		
Installation: All But FXSB.....	2-58		
Removal: FXSB.....	2-59		
Installation: FXSB.....	2-59		
<b>2.17 ABS: HYDRAULIC CONTROL UNIT (HCU)</b>			
Front Hydraulic Control Unit (HCU).....	2-60		
Removal.....	2-60		
Installation.....	2-60		
Rear Hydraulic Control Unit (HCU).....	2-61		
Removal.....	2-61		
Installation.....	2-61		
<b>2.18 BLEEDING BRAKES</b>			
General.....	2-63		
Procedure.....	2-63		
<b>2.19 FRONT FORK</b>			
General.....	2-65		
Fork Oil Leak Check.....	2-65		
Fork Oil Seals.....	2-65		
Oil Leak Check.....	2-65		
Replacing Fork Oil.....	2-65		
Removal.....	2-66		
Disassembly.....	2-66		
Cleaning and Inspection.....	2-71		
Assembly.....	2-71		
Installation.....	2-71		
<b>2.20 STEERING HEAD</b>			
Removal.....	2-73		
FLSTC, FLSTF/B, FLSTN, FLS Models.....	2-73		
FXST Model.....	2-73		
FXSB Models.....	2-73		
Inspection.....	2-74		
All Models.....	2-74		
Disassembly.....	2-74		
Removing Lower Bearings From Fork Stem.....	2-74		
Steering Head Bearing Race Removal.....	2-74		
Assembly.....	2-75		
Installation.....	2-75		
FLSTC, FLSTF/B, FLSTN, FLS Models.....	2-75		
FXST Models.....	2-75		
FXSB Model.....	2-76		
<b>2.21 BELT GUARD AND DEBRIS DEFLECTOR</b>			
Removal.....	2-77		
Belt Guard.....	2-77		
Debris Deflector.....	2-77		
Installation.....	2-77		
Belt Guard.....	2-77		
Debris Deflector.....	2-77		

# TABLE OF CONTENTS

## 2.22 REAR SHOCK ABSORBERS

General.....	2-78
Removal.....	2-78
Installation.....	2-78
Shock Disposal.....	2-79

## 2.23 REAR FORK

Removal.....	2-81
Cleaning and Inspection.....	2-82
Pivot Bearing Replacement.....	2-82
Installation.....	2-83

## 2.24 THROTTLE CONTROL

Removal/Disassembly.....	2-84
Cleaning and Inspection.....	2-84
Assembly/Installation.....	2-84

## 2.25 CLUTCH CONTROL

Removal.....	2-86
Installation.....	2-86

## 2.26 LEFT HAND GRIP

Removal and Installation.....	2-88
Removal.....	2-88
Installation.....	2-88

## 2.27 HANDLEBAR: FLSTC, FLSTN, FLS, FXST

Removal.....	2-89
Installation.....	2-90

## 2.28 HANDLEBAR: FLSTF/B

Removal.....	2-91
Installation.....	2-92

## 2.29 HANDLEBAR: FXSB

Removal.....	2-95
Handlebars.....	2-95
Lower Handlebar Clamps.....	2-95
Installation.....	2-95
Lower Clamp.....	2-95
Handlebars.....	2-96
Return to Service.....	2-96

## 2.30 FRONT FENDER

Removal.....	2-98
Installation.....	2-99

## 2.31 REAR FENDER: FLSTC

Removal.....	2-100
Installation.....	2-100

## 2.32 REAR FENDER: FLSTF/B

Removal.....	2-102
Installation.....	2-102

## 2.33 REAR FENDER: FXST

Removal.....	2-103
Installation.....	2-103

## 2.34 REAR FENDER: FLS

Removal.....	2-105
Installation.....	2-105
License Plate Bracket Assembly and Installation: FLS (all but Domestic and California models).....	2-105
License Plate Bracket Assembly and Installation: FLS (Domestic and California models).....	2-106
Fender Installation.....	2-106

## 2.35 REAR FENDER: FXSB

Removal.....	2-108
Installation.....	2-109

## 2.36 REAR FENDER: FLSTN

Removal.....	2-110
Disassembly.....	2-110
Assembly.....	2-111
Installation.....	2-112

## 2.37 REAR FENDER WIRE CONDUIT

Installation.....	2-113
-------------------	-------

## 2.38 FOOTBOARDS AND FOOTRESTS

Rider Footboards.....	2-114
Removal.....	2-114
Installation.....	2-114
Rider Footrest.....	2-114
Removal.....	2-114
Installation.....	2-114
Passenger Footrest.....	2-114
Removal.....	2-114
Installation.....	2-115

## 2.39 JIFFY STAND

Cleaning.....	2-116
Sensor: HDI Models.....	2-116
Removal.....	2-117
Installation.....	2-117

## 2.40 FORK LOCK

Removal.....	2-118
Installation.....	2-118

## 2.41 SEAT AND STRAP RETENTION NUT

Replacement.....	2-119
------------------	-------

## 2.42 SEAT: FLS, FXST, FXSB

Replacement.....	2-120
Removal.....	2-120
Installation.....	2-120

## 2.43 SEAT: FLSTN, FLSTF, FLSTFB, FLSTC

Removal and Installation.....	2-121
-------------------------------	-------

## 2.44 LUGGAGE RACK: FLSTN

Removal and Installation.....	2-122
-------------------------------	-------

## 2.45 SADDLEBAGS: FLSTC

Removal.....	2-123
Installation.....	2-123

## TABLE OF CONTENTS

<b>2.46 WINDSHIELD: FLSTC</b>	
Removal.....	2-125
Installation.....	2-125
<b>2.47 SAREE GUARD: INDIA MODELS</b>	
Upper Saree Guards: All but FXSB.....	2-126
Removal.....	2-126
Installation.....	2-126
Upper Saree Guards: FXSB.....	2-126
Removal.....	2-126
Installation.....	2-126
Lower Saree Guard.....	2-126
Removal.....	2-126
Installation.....	2-126
<b>2.48 FRONT LICENSE PLATE BRACKET</b>	
Removal and Installation.....	2-127
<b>2.49 MEDALLIONS, BADGES AND TANK EMBLEMS</b>	
Removal.....	2-128
Installation.....	2-128
<b>ENGINE</b>	
<b>3.1 FASTENER TORQUE VALUES</b>	
Fastener Torque Values in this Chapter.....	3-1
<b>3.2 SPECIFICATIONS</b>	
Specifications.....	3-3
<b>3.3 SERVICE WEAR LIMITS</b>	
General.....	3-5
<b>3.4 ENGINE OIL FLOW</b>	
Oil Feed.....	3-7
Top End.....	3-8
Bottom End.....	3-9
Chain Guide Bracket.....	3-11
Oil Return.....	3-11
<b>3.5 OIL PUMP OPERATION</b>	
General.....	3-12
Operation.....	3-12
<b>3.6 BREather OPERATION</b>	
General.....	3-14
<b>3.7 OIL PRESSURE</b>	
Oil Pressure Indicator Lamp.....	3-15
Checking Oil Pressure.....	3-15
<b>3.8 TROUBLESHOOTING</b>	
Diagnosing Valve Train Noise.....	3-17
Compression Test.....	3-17
Cylinder Leakdown Test.....	3-17
Diagnosing Smoking Engine or High Oil Consumption.....	3-18
Check Prior to Cylinder Head Removal.....	3-18
Check After Cylinder Head Removal.....	3-18
<b>3.9 HOW TO USE THIS SECTION</b>	
Top End Repair.....	3-19
Bottom End Repair.....	3-19
Typical Symptoms.....	3-19
<b>3.10 TOP END SERVICE</b>	
Engine in Chassis.....	3-20
Engine Removed from Chassis.....	3-21
<b>3.11 CAM COMPARTMENT SERVICE</b>	
Engine in Chassis.....	3-22
Engine Removed From Chassis.....	3-23
<b>3.12 STRIPPING MOTORCYCLE FOR SERVICE</b>	
Procedure.....	3-24
<b>3.13 ASSEMBLING MOTORCYCLE AFTER SERVICE</b>	
Procedure.....	3-25
<b>3.14 REMOVING ENGINE FROM CHASSIS</b>	
Procedure.....	3-26
<b>3.15 INSTALLING ENGINE IN CHASSIS</b>	
Procedure.....	3-27
<b>3.16 TOP END OVERHAUL: DISASSEMBLY</b>	
General.....	3-29
Rocker Covers.....	3-29
Rocker Arm Support Plate.....	3-29
Pushrods, Lifters and Covers.....	3-31
Cylinder Head.....	3-31
Cylinder.....	3-32
Piston.....	3-33
<b>3.17 BREather ASSEMBLY</b>	
Disassembly.....	3-35
Cleaning and Inspection.....	3-35
Assembly.....	3-35
<b>3.18 ROCKER ARM SUPPORT PLATE</b>	
Disassembly.....	3-36
Cleaning and Inspection.....	3-36
Inspection.....	3-36
Rocker Shaft Fit.....	3-36
Rocker Arm Shaft to Bushing.....	3-37
Replace Rocker Arm Bushings.....	3-37
Assembly.....	3-38
<b>3.19 PUSHRODS, LIFTERS AND COVERS</b>	
Disassembly.....	3-39
Cleaning and General Inspection.....	3-39
Lifter Inspection.....	3-39
Assembly.....	3-40
<b>3.20 CYLINDER HEAD</b>	
Disassembly.....	3-41
Cleaning.....	3-42

# TABLE OF CONTENTS

Inspection.....	3-42	Installation.....	3-82
Cylinder Head.....	3-42		
Valve Guides.....	3-43		
Valves.....	3-43		
Valve Springs.....	3-43		
Tapered Keepers.....	3-43		
Valve Seats.....	3-43		
Valve Guide Replacement.....	3-43		
Removal.....	3-43		
Installation.....	3-44		
Valve and Seat Refacing.....	3-47		
Assembly.....	3-49		
<b>3.21 CYLINDER</b>			
Cleaning.....	3-51		
Inspection.....	3-51		
Deglazing Cylinder.....	3-53		
Boring and Honing Cylinder.....	3-53		
<b>3.22 PISTON</b>			
Disassembly.....	3-55		
Piston Rings.....	3-55		
Cleaning.....	3-55		
Inspection.....	3-55		
Assembly.....	3-57		
Checking Piston Ring Gap.....	3-57		
Installing Piston Rings.....	3-57		
<b>3.23 TOP END OVERHAUL: ASSEMBLY</b>			
General.....	3-59		
Piston.....	3-59		
Cylinder.....	3-60		
Cylinder Head.....	3-62		
Pushrods, Lifters and Covers.....	3-66		
Rocker Arm Support Plate.....	3-67		
Breather and Rocker Cover.....	3-68		
<b>3.24 CAM COMPARTMENT AND COMPONENTS</b>			
Cam Support Plate and Cover Removal.....	3-69		
Prepare Engine.....	3-69		
Cam Chain and Sprockets Removal.....	3-69		
Cam Support Plate Removal.....	3-70		
Cam Support Plate Cleaning and Inspection.....	3-71		
Oil Pressure Valve.....	3-71		
Cam Support Plate.....	3-71		
Camshafts.....	3-71		
Removal.....	3-71		
Installation.....	3-72		
Oil Pressure Relief Valve.....	3-73		
Removal.....	3-73		
Inspection.....	3-73		
Installation.....	3-74		
Cam Needle Bearings.....	3-74		
Removal.....	3-74		
Installation.....	3-75		
Cam Support Plate and Cover Installation.....	3-77		
<b>3.25 OIL PUMP</b>			
Removal.....	3-81		
Cleaning and Inspection.....	3-81		
Installation.....	3-82		
<b>3.26 CRANKCASE DISASSEMBLY AND REPAIR</b>			
Crankcase Disassembly.....	3-83		
Counterbalancer Assembly.....	3-83		
Cleaning and Inspection.....	3-85		
Right Crankcase Half.....	3-86		
Chain Guide Screen.....	3-86		
Main Bearing Removal.....	3-86		
Main Bearing Installation.....	3-87		
Piston Jets Removal.....	3-87		
Piston Jets Installation.....	3-87		
Left Crankcase Half.....	3-88		
Main Bearing Removal.....	3-88		
Main Bearing Installation.....	3-89		
Sprocket Shaft Bearing Inner Race.....	3-89		
Removal.....	3-89		
Installation.....	3-90		
Cylinder Studs.....	3-92		
Removal.....	3-92		
Installation.....	3-92		
Pipe Plugs and Oil Fittings.....	3-92		
Removal/Installation.....	3-92		
<b>3.27 FLYWHEEL AND CONNECTING RODS</b>			
General.....	3-93		
Symptoms.....	3-93		
No Oil Pressure.....	3-93		
Vibration.....	3-93		
Inspection.....	3-93		
Measuring Crankshaft Runout.....	3-93		
Crankshaft Installed.....	3-93		
Crankshaft Removed.....	3-94		
<b>3.28 COUNTERBALANCER ASSEMBLY REPAIR</b>			
Cleaning, Inspection, and Repair.....	3-95		
General.....	3-95		
Balance Shaft Removal.....	3-95		
Bearing Removal.....	3-96		
Balance Shaft Installation.....	3-96		
Balance Shaft Support Bearings Removal.....	3-97		
Balance Shaft Support Bearings Installation.....	3-97		
Front and Rear Balance Sprockets.....	3-98		
Hydraulic Tensioners.....	3-98		
Chain Tensioner Guides.....	3-98		
Balance Shaft Support.....	3-98		
Balance Chain.....	3-99		
<b>3.29 CRANKCASE ASSEMBLY</b>			
Counterbalancer Assembly Installation.....	3-100		
Crankcase.....	3-103		
<b>3.30 OIL TANK: ALL BUT FXSB</b>			
Removal and Disassembly.....	3-106		
Oil Tank.....	3-106		
Oil Line Fittings/Retainers.....	3-108		
Installation.....	3-109		

## TABLE OF CONTENTS

<b>3.31 OIL TANK: FXSB</b>	
Removal and Disassembly.....	3-110
Oil Tank.....	3-110
Oil Line Fittings/Retainers.....	3-112
Installation.....	3-113
<b>FUEL SYSTEM</b>	
<b>4.1 FASTENER TORQUE VALUES</b>	
Fastener Torque Values in this Chapter.....	4-1
<b>4.2 SPECIFICATIONS: FUEL SYSTEM</b>	
Specifications.....	4-3
<b>4.3 AIR CLEANER ASSEMBLY</b>	
Removal.....	4-4
Installation.....	4-4
Backplate Assembly: HDI Models.....	4-5
<b>4.4 FUEL SUPPLY LINE</b>	
Purging Fuel Supply Line.....	4-6
Disconnecting Fuel Supply Line.....	4-6
<b>4.5 FUEL PRESSURE TEST</b>	
General.....	4-7
Testing.....	4-7
<b>4.6 FUEL TANK</b>	
General.....	4-9
Removal.....	4-9
Cleaning and Inspection.....	4-10
Installation.....	4-11
<b>4.7 CONSOLE: FXSB</b>	
Removal.....	4-12
Installation.....	4-12
<b>4.8 THROTTLE POSITION SENSOR (TPS)</b>	
General.....	4-13
Removal.....	4-13
Installation.....	4-13
<b>4.9 INTAKE AIR TEMPERATURE SENSOR (IAT)</b>	
General.....	4-14
Removal.....	4-14
Installation.....	4-14
<b>4.10 ENGINE TEMPERATURE SENSOR (ET)</b>	
General.....	4-15
Removal.....	4-15
Installation.....	4-15
<b>4.11 INDUCTION MODULE</b>	
Removal.....	4-16
Installation.....	4-17
<b>4.12 IDLE AIR CONTROL (IAC)</b>	
General.....	4-18
<b>4.13 MANIFOLD ABSOLUTE PRESSURE SENSOR (MAP)</b>	
Removal.....	4-19
Installation.....	4-19
<b>4.14 OXYGEN (O<sub>2</sub>) SENSOR</b>	
General.....	4-20
Removal.....	4-20
Front O <sub>2</sub> Sensor.....	4-20
Rear O <sub>2</sub> Sensor.....	4-20
Installation.....	4-20
Front O <sub>2</sub> Sensor.....	4-20
Rear O <sub>2</sub> Sensor.....	4-20
<b>4.15 FUEL INJECTORS</b>	
General.....	4-22
Removal.....	4-22
Installation.....	4-22
<b>4.16 FUEL PUMP AND FUEL GAUGE SENDING UNIT</b>	
General.....	4-24
Removal.....	4-24
Vapor Valve.....	4-25
Disassembly and Assembly.....	4-26
Fuel Filter.....	4-26
Regulator.....	4-26
Inlet sock.....	4-27
Fuel Pump.....	4-27
Installation.....	4-28
<b>4.17 EXHAUST SYSTEM</b>	
Mufflers: FLSTC, FXST, FXSB.....	4-29
Removal.....	4-29
Assembly.....	4-29
System: FLSTC, FXST, FXSB.....	4-29
Removal.....	4-29
Installation.....	4-29
Mufflers: FLSTN, FLSTF/B, FLS.....	4-31
Removal.....	4-31
Assembly.....	4-31
System: FLSTN, FLSTF/B, FLS.....	4-31
Removal.....	4-31
Installation.....	4-31
<b>4.18 INTAKE LEAK TEST</b>	
General.....	4-33
Leak Tester.....	4-33
Parts List.....	4-33
Tester Assembly.....	4-33
Tester Adjustment.....	4-33
Procedure.....	4-33
<b>4.19 EVAPORATIVE EMISSIONS CONTROL SYSTEM</b>	
General.....	4-35
Charcoal Canister.....	4-36

# TABLE OF CONTENTS

Removal.....	4-36
Installation.....	4-36
Purge Solenoid.....	4-36
Removal.....	4-36
Installation.....	4-36
Hose Routing/Replacement.....	4-36
Fuel Tank Vent Hose.....	4-36
Purge Solenoid-to-Induction Module Tube.....	4-36
Charcoal Canister-to-Purge Solenoid Tube.....	4-37
Vent Tube-to-Charcoal Canister Tube.....	4-37
<b>DRIVE</b>	
<b>5.1 FASTENER TORQUE VALUES</b>	
Fastener Torque Values in this Chapter.....	5-1
<b>5.2 SPECIFICATIONS: DRIVE</b>	
Specifications.....	5-2
<b>5.3 PRIMARY CHAINCASE COVER</b>	
General.....	5-3
Removal.....	5-3
Installation.....	5-3
<b>5.4 DRIVE COMPONENTS</b>	
Removal.....	5-4
Installation.....	5-6
<b>5.5 PRIMARY CHAINCASE HOUSING</b>	
Removal.....	5-9
Inspection.....	5-9
Mainshaft Bearing and Seal.....	5-9
Removal.....	5-9
Installation.....	5-9
Mainshaft Bearing Inner Race.....	5-10
Removal.....	5-10
Installation.....	5-10
Installation.....	5-11
<b>5.6 CLUTCH</b>	
Removal and Installation.....	5-13
Clutch Pack Only.....	5-13
Partial Disassembly.....	5-13
Cleaning And Inspection.....	5-13
Assembly.....	5-14
Clutch Pack and Bearing.....	5-15
Complete Disassembly.....	5-15
Assembly.....	5-16
<b>5.7 TRANSMISSION SPROCKET</b>	
Removal.....	5-18
Cleaning and Inspection.....	5-19
Installation.....	5-19
<b>5.8 DRIVE BELT</b>	
Removal.....	5-21
Inspection.....	5-21
Installation.....	5-21
<b>TRANSMISSION</b>	
<b>6.1 FASTENER TORQUE VALUES</b>	
Fastener Torque Values in this Chapter.....	6-1
<b>6.2 SPECIFICATIONS: TRANSMISSION</b>	
Specifications.....	6-2
Service Wear Limits.....	6-2
<b>6.3 TRANSMISSION</b>	
Power Flow.....	6-3
Neutral.....	6-3
First Gear.....	6-3
Second Gear.....	6-3
Third Gear.....	6-3
Fourth Gear.....	6-3
Fifth Gear.....	6-3
Sixth Gear.....	6-3
<b>6.4 SHIFTER</b>	
Adjustment.....	6-5
Shifter Rod Adjustment.....	6-5
Shift Lever Replacement.....	6-5
<b>6.5 CLUTCH RELEASE COVER</b>	
Removal and Disassembly.....	6-7
Cleaning and Inspection.....	6-7
Assembly and Installation.....	6-8
<b>6.6 TRANSMISSION ASSEMBLY</b>	
Removal.....	6-9
Disassembly.....	6-10
Shifter Cam/Shifter Forks.....	6-10
Mainshaft.....	6-12
Countershaft.....	6-15
Removing Bearing Housing Bearings.....	6-16
Cleaning and Inspection.....	6-17
Assembly.....	6-17
Installing Bearing Housing Bearings.....	6-17
Countershaft.....	6-18
Mainshaft.....	6-18
Shifter Cam/Shifter Forks.....	6-19
Installation.....	6-21
<b>6.7 MAIN DRIVE GEAR AND BEARING</b>	
Removal.....	6-22
Cleaning and Inspection.....	6-23
Needle Bearing Replacement.....	6-24
Installation.....	6-25
Installing Main Drive Gear Bearing.....	6-25
Installing Main Drive Gear.....	6-26
Installing Main Drive Gear Large Seal.....	6-26
<b>6.8 TRANSMISSION CASE</b>	
Removal.....	6-29
Installation.....	6-29
Disassembly.....	6-30
Shifter Arm Assembly.....	6-30
Cleaning and Inspection.....	6-30
Assembly.....	6-31

# TABLE OF CONTENTS

Countershaft Needle Bearing Replacement.....	6-31	Installation.....	7-17
Shifter Pawl Lever Assembly.....	6-31		
<b>ELECTRICAL</b>			
<b>7.1 FASTENER TORQUE VALUES</b>			
Fastener Torque Values in this Chapter.....	7-1		
<b>7.2 SPECIFICATIONS: ELECTRICAL</b>			
Specifications.....	7-4		
<b>7.3 ELECTRICAL PANEL</b>			
General.....	7-5		
Removal: All But FXSB.....	7-5		
Installation: All But FXSB.....	7-6		
Removal: FXSB.....	7-6		
Installation: FXSB.....	7-6		
<b>7.4 ELECTRONIC CONTROL MODULE (ECM)</b>			
General.....	7-8		
Removal: All But FXSB.....	7-8		
Installation: All But FXSB.....	7-8		
Removal: FXSB.....	7-8		
Installation: FXSB.....	7-8		
<b>7.5 BODY CONTROL MODULE (BCM)</b>			
General.....	7-9		
BCM Configuration.....	7-9		
Removal: All But FXSB.....	7-9		
Installation: All But FXSB.....	7-9		
Removal: FXSB.....	7-10		
Installation: FXSB.....	7-10		
<b>7.6 H-DSSS ACTUATION</b>			
Sidecar Configuration.....	7-11		
Actuation.....	7-11		
Fob Assignment.....	7-11		
<b>7.7 PERSONAL IDENTIFICATION NUMBER (PIN)</b>			
General.....	7-12		
Changing The PIN.....	7-12		
Modifying an Existing PIN.....	7-12		
<b>7.8 HD-SSS MAINTENANCE</b>			
Fob Battery.....	7-14		
Battery Replacement Schedule.....	7-14		
Battery Replacement.....	7-14		
Smart Siren (If Installed).....	7-14		
Battery Replacement Schedule.....	7-14		
Battery Replacement.....	7-14		
<b>7.9 SECURITY SIREN</b>			
Removal: All But FXSB.....	7-15		
Installation: All But FXSB.....	7-15		
Removal: FXSB.....	7-15		
Installation: FXSB.....	7-16		
<b>7.10 FUSES</b>			
Removal.....	7-17		
<b>7.11 IGNITION AND LIGHT SWITCH</b>			
General.....	7-18		
Removal and Installation: All But FXSB.....	7-18		
Removal and Installation: FXSB.....	7-19		
<b>7.12 BATTERY CABLES</b>			
Routing Procedure.....	7-20		
<b>7.13 STARTER</b>			
General.....	7-22		
Removal.....	7-22		
Drive Assembly.....	7-22		
Disassembly.....	7-22		
Inspection.....	7-22		
Assembly.....	7-23		
Solenoid.....	7-23		
Cover and Plunger Removal.....	7-23		
Short Post Contact: Starter.....	7-23		
Long Post Contact: Battery Positive.....	7-24		
Plunger and Cover Installation.....	7-24		
Installation.....	7-24		
<b>7.14 HEADLAMP</b>			
General.....	7-26		
Headlamp Assembly Removal and Installation.....	7-26		
Removal.....	7-26		
Installation.....	7-26		
Bulb Removal and Installation.....	7-26		
FXST, FXSB Models.....	7-27		
FLSTC, FLSTF/B, FLSTN and FLS Models.....	7-27		
<b>7.15 TAIL LAMP: ALL BUT FLSTN</b>			
General.....	7-29		
Bulb Replacement.....	7-29		
Base Replacement.....	7-29		
<b>7.16 TAIL LAMP: FLSTN</b>			
Bulb Replacement.....	7-31		
Tail Lamp Replacement.....	7-31		
<b>7.17 AUXILIARY LAMPS: FLSTC, FLSTN</b>			
Auxiliary Lamp Bulb.....	7-33		
Removal.....	7-33		
Installation.....	7-33		
FLSTC Models.....	7-33		
Auxiliary Lamp Bracket Removal.....	7-33		
Auxiliary Lamp Bracket Installation.....	7-34		
Auxiliary Lamp Housing Removal.....	7-34		
Auxiliary Lamp Housing Installation.....	7-34		
FLSTN Models.....	7-36		
Auxiliary Lamp Bracket Removal.....	7-36		
Auxiliary Lamp Bracket Installation.....	7-36		
Auxiliary Lamp Housing Removal.....	7-37		
Auxiliary Lamp Housing Installation.....	7-37		
Adjustment: FLSTC/FLSTN Models.....	7-38		
<b>7.18 TURN SIGNALS AND RUNNING LIGHTS</b>			
Bulb Replacement: Bullet Style.....	7-40		
Bulb Replacement: Flat Lens Style.....	7-40		

# TABLE OF CONTENTS

Lamp Replacement.....	7-40
All Models.....	7-40
Front Turn Signals.....	7-41
Front Turn Signals: FLSTC, FLSTN.....	7-42
Rear Turn Signals: All But FLSTN, FLS, FXSB.....	7-42
Rear Turn Signals: FLS.....	7-42
Rear Turn Signals: FXSB.....	7-44
Rear Turn Signals: FLSTN.....	7-45
<b>7.19 CRANK POSITION SENSOR (CKP)</b>	
General.....	7-47
Removal.....	7-47
Installation.....	7-47
<b>7.20 AUTOMATIC COMPRESSION RELEASE (ACR)</b>	
General.....	7-48
Removal.....	7-48
Installation.....	7-48
<b>7.21 IGNITION COIL</b>	
Removal.....	7-50
All But FXSB.....	7-50
FXSB.....	7-50
Installation.....	7-50
All But FXSB.....	7-50
FXSB.....	7-50
<b>7.22 SPARK PLUG CABLES</b>	
General.....	7-52
Removal.....	7-52
Installation.....	7-52
<b>7.23 VOLTAGE REGULATOR</b>	
Disassembly.....	7-53
Installation.....	7-53
<b>7.24 ALTERNATOR</b>	
Removal.....	7-54
Cleaning and Inspection.....	7-54
Installation.....	7-54
<b>7.25 FUEL GAUGE</b>	
General.....	7-55
Removal.....	7-55
Installation.....	7-55
<b>7.26 SPEEDOMETER</b>	
General.....	7-57
Removal: All But FXSB.....	7-57
Installation: All But FXSB.....	7-57
Removal: FXSB.....	7-57
Installation: FXSB.....	7-58
<b>7.27 VEHICLE SPEED SENSOR (VSS)</b>	
General.....	7-59
Removal.....	7-59
Installation.....	7-59
<b>7.28 WHEEL SPEED SENSORS</b>	
Front Wheel Speed Sensor.....	7-60
Removal.....	7-60
Installation.....	7-61
Rear Wheel Speed Sensor.....	7-61
Removal.....	7-61
Installation.....	7-62
<b>7.29 INDICATOR LAMPS</b>	
General.....	7-64
Removal: All But FXSB.....	7-64
Installation: All But FXSB.....	7-64
Removal: FXSB.....	7-65
Installation: FXSB.....	7-65
<b>7.30 NEUTRAL SWITCH</b>	
General.....	7-66
Removal.....	7-66
Installation.....	7-66
<b>7.31 OIL PRESSURE SWITCH</b>	
General.....	7-67
Removal.....	7-67
Installation.....	7-67
<b>7.32 REAR STOP LAMP SWITCH</b>	
General.....	7-68
Removal.....	7-68
Installation.....	7-68
<b>7.33 HORN</b>	
Inspection.....	7-69
Removal and Installation: All But FXSB.....	7-69
Removal and Installation: FXSB.....	7-70
<b>7.34 ACTIVE EXHAUST</b>	
General.....	7-71
Removal.....	7-71
Repair.....	7-71
Installation.....	7-71
<b>7.35 MAIN WIRING HARNESS</b>	
Removal.....	7-72
Installation.....	7-73
<b>7.36 HANDLEBAR CONTROL MODULES</b>	
General.....	7-75
Repair Procedures.....	7-75
<b>7.37 RIGHT HANDLEBAR CONTROL MODULE</b>	
Removal.....	7-76
Installation.....	7-77
Front Brake Switch Replacement.....	7-78
<b>7.38 LEFT HANDLEBAR CONTROL MODULE</b>	
Removal.....	7-79
Installation.....	7-79
Clutch Switch Replacement.....	7-80

### **APPENDIX A CONNECTOR REPAIR**

#### **A.1 AUTOFUSE UNSEALED ELECTRICAL CONNECTORS**

Autofuse Unsealed Connector Repair.....	A-1
General.....	A-1
Disassembly.....	A-1
Assembly.....	A-1

#### **A.2 BOSCH COMPACT 1.1M CONNECTOR**

Bosch Compact 1.1M Connector.....	A-2
General.....	A-2
Housings.....	A-2
Removing Socket Terminal.....	A-2
Installing Socket Terminal.....	A-2

#### **A.3 BOSCH BTC SEALED CONNECTOR**

Bosch BTC Sealed Connector Repair.....	A-3
Plugging and Unplugging Connector.....	A-3
Removing and Installing Connector Cover.....	A-3
Removing and Installing Wire Terminals.....	A-4
Crimping Terminals to Leads.....	A-5

#### **A.4 DELPHI 100W MICRO-PACK SEALED CONNECTOR**

Delphi 100W Micro-Pack Sealed Connector Repair.....	A-6
General.....	A-6
Separating Socket Housing From ECM.....	A-6
Mating Socket Housing To ECM.....	A-6
Removing Socket Terminal.....	A-6
Installing Socket Terminal.....	A-6
Crimping Terminals.....	A-7

#### **A.5 DELPHI 150 METRI-PACK SEALED CONNECTORS**

Delphi 150 Metri-Pack Sealed Connector Repair.....	A-8
General.....	A-8
Separating Pin and Socket Housings.....	A-8
Mating Pin and Socket Housings.....	A-8
Removing Socket Terminal.....	A-8
Inserting Socket Terminal.....	A-8

#### **A.6 DELPHI 280 METRI-PACK UNSEALED CONNECTORS**

Fuse Block Repair.....	A-10
Removing Socket Terminals.....	A-10
Installing Socket Terminals.....	A-10
Crimping Terminals.....	A-10

#### **A.7 DELPHI 480 METRI-PACK UNSEALED CONNECTORS**

Delphi 480 Metri-Pack Unsealed Connector Repair.....	A-11
General.....	A-11
Separating Pin and Socket Housings.....	A-11
Mating Pin and Socket Housings.....	A-11
Removing Socket Terminals.....	A-11
Installing Socket Terminals.....	A-11

#### **A.8 DELPHI 630 METRI-PACK UNSEALED CONNECTORS**

Delphi 630 Metri-Pack Unsealed Connector Repair.....	A-12
Separating Pin and Socket Housings.....	A-12
Mating Pin and Socket Housings.....	A-12
Removing Socket Terminal.....	A-12
Installing Socket Terminal.....	A-12

#### **A.9 DELPHI 800 METRI-PACK SEALED MAIN FUSE HOUSING**

Delphi 800 Metri-Pack Sealed Main Fuse Housing Repair.....	A-13
Removing Socket Terminals.....	A-13
Installing Socket Terminals.....	A-13

#### **A.10 DELPHI METRI-PACK TERMINAL REPAIR**

Metri-Pack Terminal Crimps.....	A-14
Matching Terminal To Crimper.....	A-14
Preparing Wire Lead.....	A-14
Crimping Wire Core.....	A-14
Crimping Insulation/Seal.....	A-15
Inspecting Crimps.....	A-15

#### **A.11 DELPHI MICRO 64 SEALED CONNECTORS**

Delphi Micro 64 Sealed Connector Repair.....	A-16
General.....	A-16
Separating Pin and Socket Housings.....	A-16
Mating Pin and Socket Housings.....	A-16
Removing Terminal.....	A-16
Installing Terminal.....	A-17
Preparing Wire Leads for Crimping.....	A-17
Crimping Terminals.....	A-17
Inspecting Crimps.....	A-17

#### **A.12 DELPHI GT 150 SEALED CONNECTORS**

Delphi GT 150 Sealed Connector Repair.....	A-19
General.....	A-19
Separating Pin and Socket Housings.....	A-19
Mating Pin and Socket Housings.....	A-19
Removing Socket Terminals.....	A-19
Installing Socket Terminals.....	A-19

#### **A.13 DEUTSCH DT SEALED CONNECTORS**

Deutsch DT Sealed Connector Repair.....	A-21
General.....	A-21
Separating Pin and Socket Housings.....	A-21
Mating Pin and Socket Housings.....	A-21
Removing Socket Terminals.....	A-21
Installing Socket Terminals.....	A-21
Removing Pin Terminals.....	A-22
Installing Pin Terminals.....	A-23
Crimping Terminals.....	A-23

#### **A.14 DEUTSCH DT SEALED TERMINAL REPAIR**

Deutsch DT Sealed Terminal Crimps.....	A-25
--	------

# TABLE OF CONTENTS

Preparing Wire Leads for Crimping.....	A-25
Crimping Terminal to Lead.....	A-25
Inspecting Crimps.....	A-25
<b>A.15 DEUTSCH DTM SEALED MINI TERMINAL REPAIR</b>	
Deutsch DTM Sealed Mini Terminal Crimps.....	A-26
Preparing Wire Leads for Crimping.....	A-26
Crimping a Mini Terminal to Wire Lead.....	A-26
Inspecting Crimps.....	A-26
<b>A.16 DEUTSCH DTM SEALED SOLID BARREL MINI TERMINAL REPAIR</b>	
Deutsch DTM Sealed Solid Barrel Terminal Crimps.....	A-27
Preparing Wire Leads For Crimping.....	A-27
Adjusting Crimper Tool.....	A-27
Crimping a Barrel Contact To Wire Lead.....	A-27
Inspecting Crimps.....	A-27
<b>A.17 JAE MX19 SEALED CONNECTORS</b>	
JAE MX19 Sealed Connectors.....	A-29
Connector Housings.....	A-29
Removing Terminals.....	A-29
Installing Terminals.....	A-29
Crimping Terminals.....	A-29
<b>A.18 MOLEX CMC SEALED CONNECTORS</b>	
Molex CMC Sealed Connectors.....	A-30
Separating the Connector.....	A-30
Removing Terminals.....	A-30
Installing Terminals.....	A-30
Crimping Terminals.....	A-31
<b>A.19 MOLEX MX 150 SEALED CONNECTORS</b>	
Molex MX 150 Sealed Connector Repair.....	A-32
Separating Pin and Socket Housings.....	A-32
Mating Pin and Socket Housings.....	A-32
Removing Terminals.....	A-32
Installing Terminals.....	A-32
Crimp Terminal to Lead.....	A-33
Prepare Lead.....	A-33
Prepare Tool.....	A-33
Position Terminal in the Punch/Die.....	A-34
Insert Stripped Lead.....	A-34
Crimp Terminal to Lead.....	A-34
Inspect Crimp.....	A-35
<b>A.20 TYCO 040 MULTILOCK UNSEALED CONNECTOR</b>	
Tyco 040 Multilock Unsealed Connector Repair.....	A-36
General.....	A-36
Separating Pin and Socket Housings.....	A-36
Mating Pin and Socket Housings.....	A-36
Removing Terminals from Housing.....	A-36
Inserting Terminals into Housing.....	A-37
Crimping Terminals to Leads.....	A-37
Inspecting Crimped Terminals.....	A-37
<b>A.21 TYCO 070 MULTILOCK UNSEALED CONNECTOR</b>	
Tyco 070 Multilock Unsealed Connector Repair.....	A-38
General.....	A-38
Separating Pin and Socket Housings.....	A-38
Mating Pin and Socket Housings.....	A-38
Removing Terminals from Housing.....	A-38
Inserting Terminals into Housing.....	A-39
Crimping Terminals to Leads.....	A-40
Inspecting Crimped Terminals.....	A-40
<b>A.22 TYCO GET 64 SEALED CONNECTOR</b>	
Tyco GET 64 Sealed Connector Repair.....	A-41
General.....	A-41
Housings.....	A-41
Removing Socket Terminals.....	A-41
Installing Socket Terminals.....	A-42
Crimping Terminals.....	A-42
<b>A.23 TYCO MCP SEALED CONNECTOR</b>	
Tyco MCP Sealed Connector.....	A-43
General.....	A-43
Housing.....	A-43
Removing the Large Terminals.....	A-43
Removing the Small Terminals.....	A-43
Installing Terminals.....	A-44
Crimping Terminals.....	A-44
<b>A.24 SEALED SPLICE CONNECTORS</b>	
Sealed Splice Connector Repair.....	A-45
General.....	A-45
Preparing Wire Leads.....	A-45
Splicing Wire Leads.....	A-45
Inspecting Seals.....	A-45
<b>APPENDIX B WIRING</b>	
<b>B.1 CONNECTORS</b>	
Connector Locations.....	B-1
Function/Location.....	B-1
Place and Color.....	B-1
Connector Number.....	B-1
Repair Instructions.....	B-1
<b>B.2 WIRING DIAGRAMS</b>	
Wiring Diagram Information.....	B-5
Wire Color Codes.....	B-5
Wiring Diagram Symbols.....	B-5
2015 Softail Wiring Diagrams.....	B-7
<b>APPENDIX C REFERENCE</b>	
<b>C.1 LENGTH CONVERSION</b>	
Conversion Table.....	C-1
<b>C.2 FLUID CONVERSION</b>	
United States System.....	C-2
Metric System.....	C-2
British Imperial System.....	C-2

## TABLE OF CONTENTS

---

### C.3 TORQUE CONVERSION

United States System.....	C-3
Metric System.....	C-3

### C.4 GLOSSARY

Acronyms and Abbreviations.....	C-4
---------------------------------	-----

### REFERENCE MATERIAL

---

TOOLS.....	I
------------	---

TORQUE VALUES.....	IX
--------------------	----

INDEX.....	XXI
------------	-----



**Thank you so much for reading.**

**Please click the “Buy Now!”  
button below to download the  
complete manual.**

***Buy Now***



**After you pay.**

**You can download the most  
perfect and complete manual in  
the world immediately.**

**Our support email:**

**ebooklibonline@outlook.com**