## V-Twin MFG. Chrome Engine Bar VT Part No. 51-0891

This is a custom application and rider safety depends on proper installation. This product should only be installed by a knowledgeable technician. V-Twin Mfg. accepts no responsibility for improper installation.

Replaces 49016-72D for 1972-up models: FX-1200, FXE-1200, FXS-1200, FXEF-1200, FXEF-80, FXB-80, FXSB, FXST, FXSTC and FXSTS. This kit will NOT fit L1987 and later FXSTC and FXSTS models equipped with extended reach forward control kit VT No. 22-0490 or 22-0491. These models require Engine Guard kit (VT No. 51-0897) and engine guard adapter bracket (VT No.31-0575).

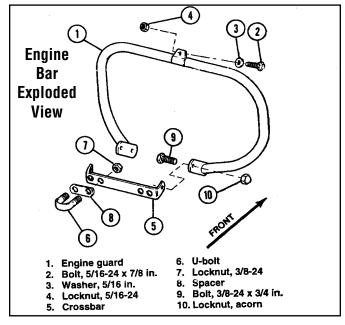
**Note:** On vehicles equipped with an engine oil cooler, a special bracket (VT No. 31-0154) must be installed to reposition oil cooler. Bracket must be ordered separately. Repositioning oil cooler requires longer hoses. Position bracket, wide section up, on front side of frame crossmember. This kit cannot be installed on 1977-up vehicles equipped with Oil Filter Kit (VT No. 40-0096) due to an interference problem between the oil filter and the engine crossbar.

**WARNING:** This engine bar may provide limited leg and cosmetic vehicle protection under unique circumstances (fall-over while stopped, very low speed slide). However, it is not designed or intended to provide protection from bodily injury

in a collision with a vehicle or any other object.

## **Qty** Description

- 1 Engine Bar Assembly
- 1 Hex Head Bolt 5/16-24 x 7/8
- 1 Washer, 5/16"
- 1 Locknut, Hex, 5/16-24
- 1 Engine Crossbar
- 2 U-bolt, 3/8-24
- 4 Locknut, 3/8-24
- 2 Engine Bar Spacer
- 2 Hex Head Bolt, 3/8-24 x 3/4
- 2 Acorn Locknut



## Installation

- 1. See illustration. Position engine bar upper center mounting bracket to crossmember at upper end of frame downtubes (ends of lower right and left mounting brackets on engine bare should be pointing upward and to the rear of the vehicle.) Insert 5/16-24 x 7/8 bolt with 5/16 washer through holes in bar bracket and crossmember. Install 5/16-24 locknut loosely over end of bolt.
- 2. On 1980-82 FXWG models with forward mounted rear brake master cylinders loosen metal brake line swivel nut on master cylinder. Rotate brake line and move upward, out of the way for crossbar clearance. Avoid sharp edges when bending and repositioning brake line. Tighten brake line swivel nut. Bleed rear brake and check brake fluid level according to appropriate Service Manual procedure.
- 3. Loosely install crossbar from kit to lower front side of frame downtubes using two U-bolts and four 3/8-24 locknuts. Right and left ends of crossbar should be pointing upward and to the front of the vehicle.
- Note: On some models the crossbar may interfere with the ignition module. If this is the case, insert two spacers from kit between the frame downtubes and the crossbar.
- 4. Attach engine bar and lower right and left mounting brackets to crossbar ends using the 3/8-24 x 3/4" hex bolts and 3/8-24 acorn locknuts from kit. (Engine bar mounting brackets are positioned outboard of crossbar end. Acorn locknuts are positioned on outboard side of engine bar mounting brackets.) Lift up engine bar/crossbar and hold in proper position against frame mounting points. Torque acorn locknuts to 33ft-lbs. Final tighten 3/8 locknuts from Step 3 evenly to 20ft-lbs. Torque 5/16 fasteners from Step 1to 19ft-lbs.