

V-Twin Mfg.
YORK 3" OPEN BELT DRIVE KIT
FITS 1991-99 ST
INCLUDES 48T FRONT & 76T REAR PULLEYS
VT No. 20-0758

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

BELT DRIVE KIT INSTALLATION GUIDE

Before installation

⚠ WARNING

1. Be sure to disconnect battery cable when original primary drive kit is disassembled and new kit installed.
2. Separate inner primary and bearing race of mainshaft. Please refer to the Harley Davidson shop manual for step by step instructions.

Motor plate & Pinion gear kit

3. Install pinion gear kit on starter motor shaft.

torque unit : ft-lbs

⚠ CAUTION

- * We supply 2 bolts 1ea (#1) 1/4-20 x 2-1/2" for all starters 1990 to 1993 and 1ea (#2) 10-32 x 2-1/2" for starters 1994 up.

Locktite : Apply
Torque : (#1) 9, (#2) 7.5

4. Install motor plate with a polished surface on the motor plate outside.
At this time, the basic face is pinion gear hole and transmission shaft hole.
5. Tighten engine assembly area(4) and transmission assembly area(4) with bolts supplied and torque to factory specs.

Locktite : Apply, Torque : 14.5

Front pulley

6. Please align the 3 holes of insert with 3-Φ6mm dowel pins which were installed in front pulley.
7. Using a drift punch or press, install insert from the top side of pulley. (Apply locktite on dowel pins.)

⚠ CAUTION

- * Dowel-pins shouldn't protrude outside of insert or front pulley

8. Install alternator cover onto back side of pulley with locktite on the 3 button head bolts supplied.

Locktite : Apply, Torque : 9

Front / Rear pulley basket & Starter housing

9. Install front pulley and rear pulley up side plate. At same time the primary belt should be installed.

⚠ CAUTION

- * Apply red loctite onto the back side of our hub 1/4 inside of the spline and let the loctite flow onto the mainshaft when sliding the rear basket assembly on.
This procedure is necessary so that the hub and mainshaft will fit together properly and will not let the mainshaft spin inside of our hub.
FAILURE TO LOCTITE THE SPLINED HUB PROPERLY WILL CAUSE THE SPLINES TO WASH OUT.

10. Tighten nut on front pulley. Use red locktite and torque to 160 ft pounds

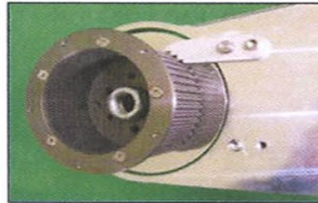
Locktite : Apply, Torque : 160

⚠ WARNING

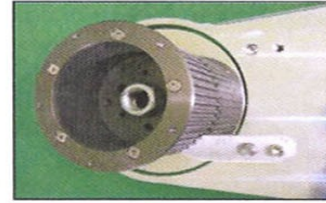
- * The special JIG must be disassembled after tightening the nut.
(Make sure to place the JIG correctly as pictured below)



Special JIG kit



To tighten



To Loosen

BELT DRIVE KIT INSTALLATION GUIDE

11. Tighten bolts and spring washers on insert after locking plate is inserted to fit nut shape.

Locktite : Apply, Torque :14.5

12. Tighten with mainshaft nut, after upside of pressure plate of rear pulley basket is disassembled.

Locktite : Apply, Torque : 75

13. Tighten shoulder bolts after the disassemble parts assemble with order

Locktite : Apply, Torque :14.5

⚠CAUTION

- * There is a "OUT" character on Adjusting Plate. The side with "Out" character should be placed upward to install.
- * The washers are not used on a new assembly, they can be added at a future date if clutch fiber wears slightly.

14. Bend lock tabs to fit shoulder bolts head.

15. Adjusting screw should be 3/4 to 1 turn loose.

⚠CAUTION

- * When clutch is hot the adjusting screw should not be seated.

16. Tighten adjusting screw with rod

Locktite : Apply, Torque :10

17. Tighten bolt at motor plate after make starter housing contacts at center of pinion gear.

⚠CAUTION

Locktite : Apply, Torque :14.5

- * Should spread grease on starter housing pinion hole area.

Side guard & Pulley cover

18. Be seated set screws and standoff nuts on center of motor plate.

Locktite : Apply, Torque : 10

Locktite : Apply, Torque : 14.5

19. Tighten button bolts after side guard contacts standoff nut

Locktite : Apply, Torque : 14.5

20. Tighten button bolts after pulley cover is installed on the front pulley and rear pulley.

Locktite : Do not apply, Torque : 6

BELT DRIVE KIT PART LIST

Motor Plate Components



Side guard

Starter Housing

Motor plate



Starter motor
Pinion gear kit



Side guard
Set screws, bolts & nuts



Transmission Main shaft nut,
Adjusting screw & nut



Transmission / Engine & Starter Housing
Bolts

Rear pulley basket Components



pulley cover (R)

Friction plates (7)

Rear pulley
basket & Hub

Steel plates (7) &
Backing plate (1)



Pressure plate



Diaphragm spring



Pulley cover
bolts

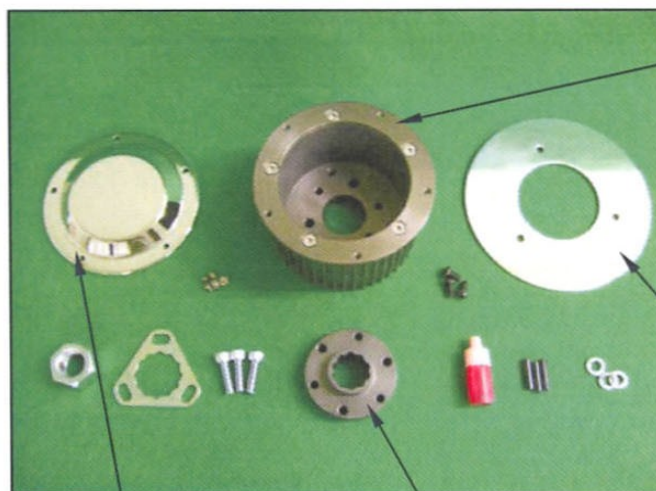


Shoulder bolts,
washers & lock tabs



Adjusting plate

Front pulley Components



Pulley cover (F)

Offset insert (stock)

Front pulley

Locktite (#262)

Alternator
cover

Alternator
bolts



Engine shaft nut &
locking plate



Bolts & washers



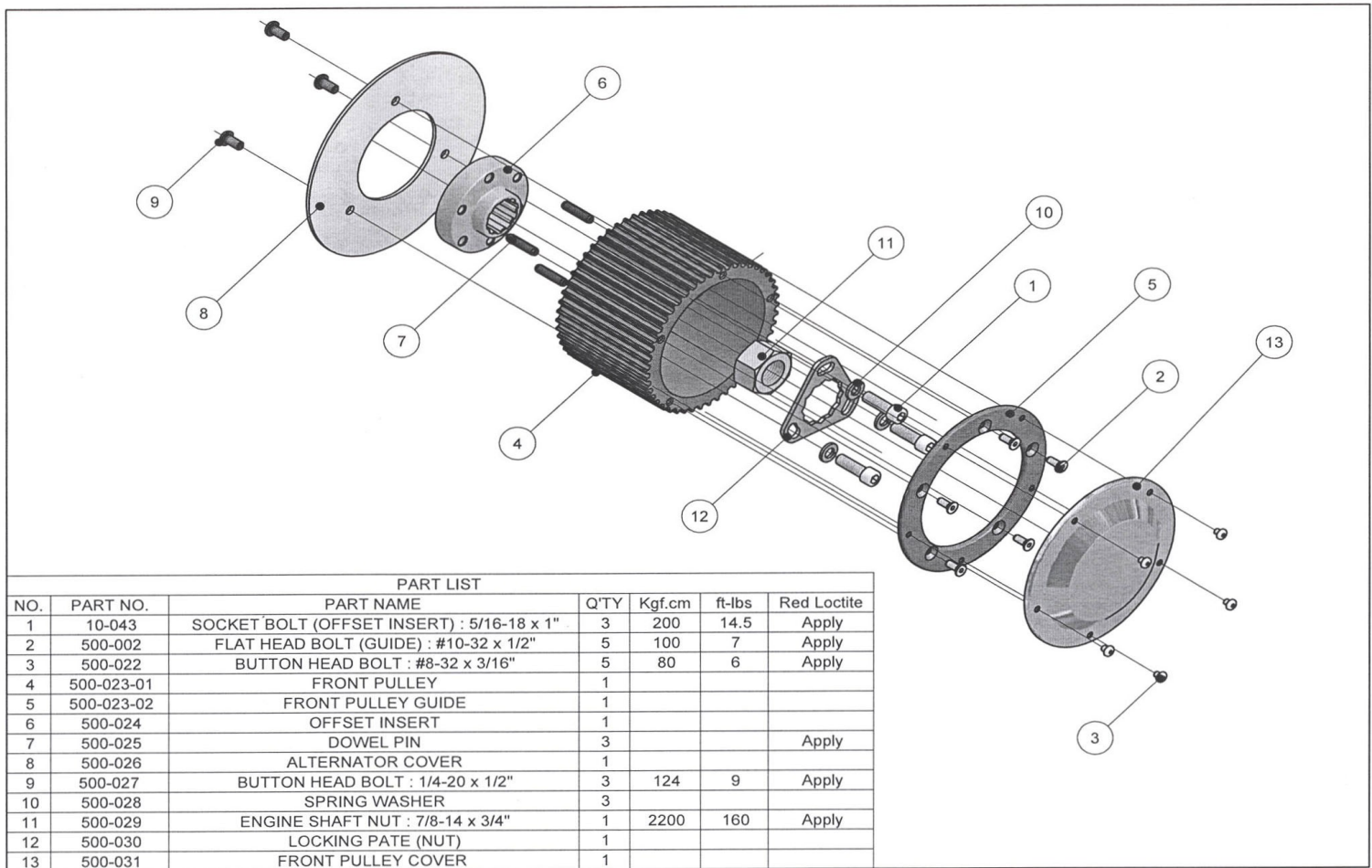
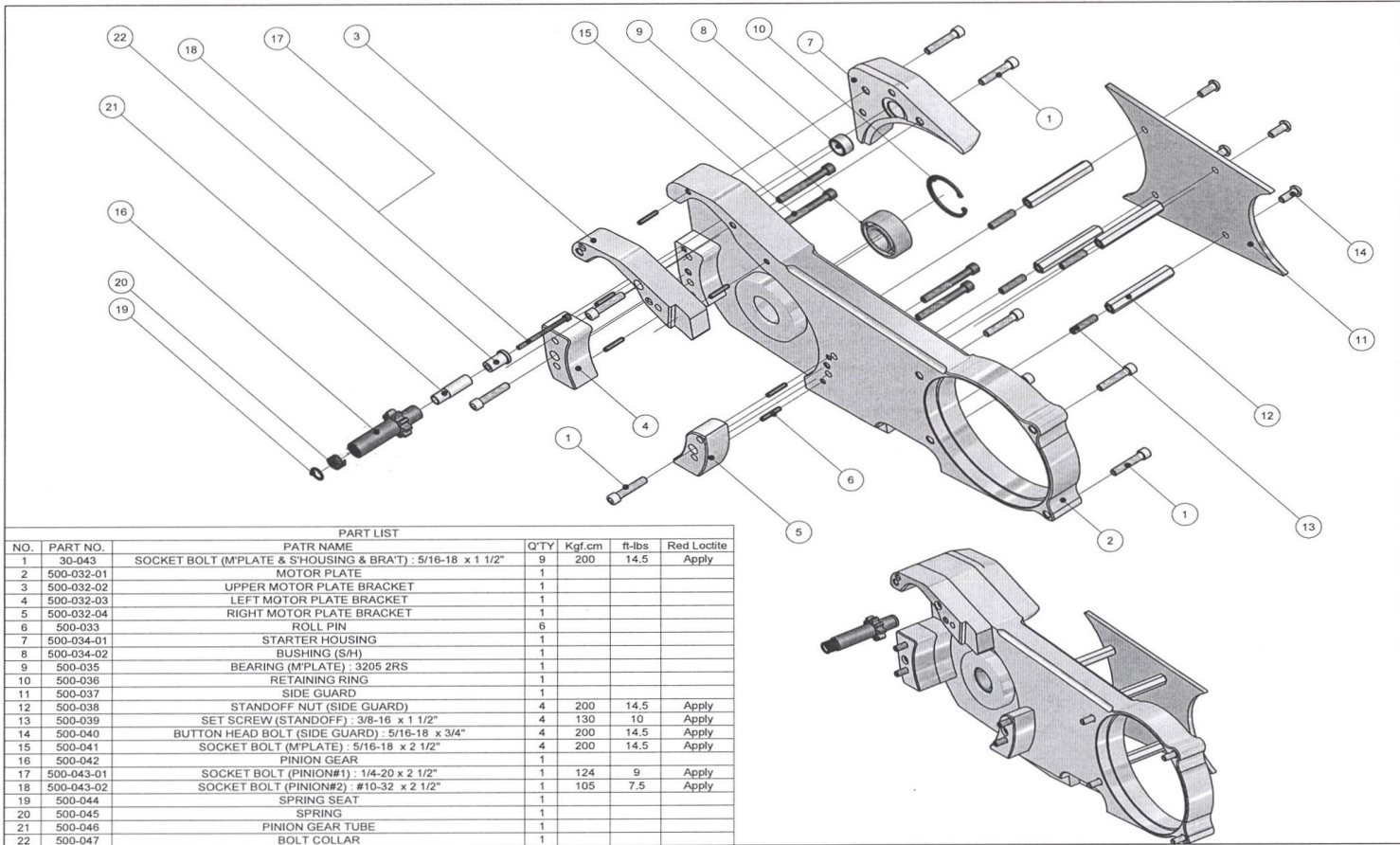
Pulley cover
bolts

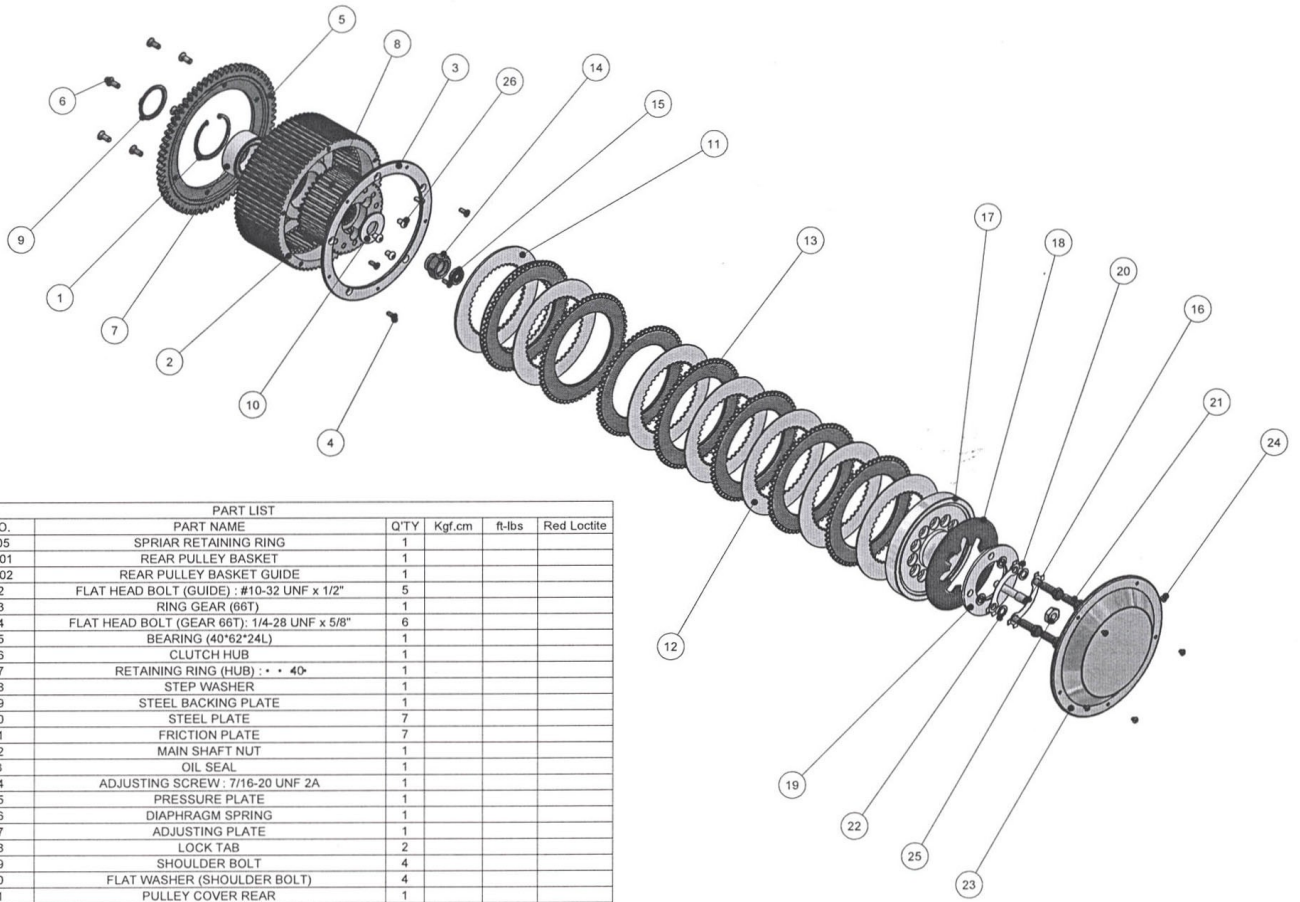


Dowel pins



3" belt





PART LIST						
NO.	PART NO.	PART NAME	Q'TY	Kgf.cm	ft-lbs	Red Loctite
1	52-001-05	SPRIAR RETAINING RING	1			
2	500-001-01	REAR PULLEY BASKET	1			
3	500-001-02	REAR PULLEY BASKET GUIDE	1			
4	500-002	FLAT HEAD BOLT (GUIDE) : #10-32 UNF x 1/2"	5			
5	500-003	RING GEAR (66T)	1			
6	500-004	FLAT HEAD BOLT (GEAR 66T): 1/4-28 UNF x 5/8"	6			
7	500-005	BEARING (40*62*24L)	1			
8	500-006	CLUTCH HUB	1			
9	500-007	RETAINING RING (HUB) : . . . 40	1			
10	500-008	STEP WASHER	1			
11	500-009	STEEL BACKING PLATE	1			
12	500-010	STEEL PLATE	7			
13	500-011	FRICTION PLATE	7			
14	500-012	MAIN SHAFT NUT	1			
15	500-013	OIL SEAL	1			
16	500-014	ADJUSTING SCREW : 7/16-20 UNF 2A	1			
17	500-015	PRESSURE PLATE	1			
18	500-016	DIAPHRAGM SPRING	1			
19	500-017	ADJUSTING PLATE	1			
20	500-018	LOCK TAB	2			
21	500-019	SHOULDER BOLT	4			
22	500-020	FLAT WASHER (SHOULDER BOLT)	4			
23	500-021	PULLEY COVER REAR	1			
24	500-022	ROUND HEAD BOLT : #8-32 UNC x 3/16"	5			
25	52-011	HEX JAM NUT : 7/16-20 UNF x 1/4"	1			
26	500-053	ROUND HEAD BOLT : 1/4-20 UNC x 3/8"	3			