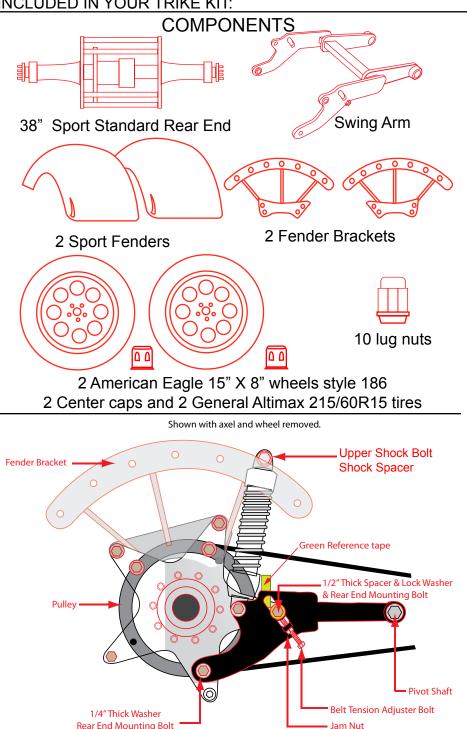
# V-ROD 38" HOT ROD TRIKE KIT



### INCLUDED IN YOUR TRIKE KIT:



# HARDWARE

# PULLEY MOUNTING

5 pcs. - 7/16" -14 x 2" Grd. 8 (Gold) Bolt 5 pcs. - 7/16" Lock Washer (Pulley)

# FENDER MOUNTING

14 pcs. - 3/8" - 16 x 1" Grd. 5 (Zinc) Bolt 14 pcs. - 3/8" I.D. 1" O.D. 1/16" Thick Grd 5 Washer 14 pcs. - 3/8" -16 Nylock Nut NOTE! Additional hardware used to mount fender brackets to the rear end are preinstalled onto the rear end.

# SHOCK MOUNTING See Drawing Page ?????

- 2 1/2" 13 x 4 1/2" Grd. 8 Bolt (Upper Shock Mount)
- $2 \frac{1}{2}$ " 13 x 2" Grd. 8 Bolt (Lower Shock Mount)
- 2 1/2" I.D. 1 1/4" O.D. 1.750" Long Spacer (Upper Shock Mount) '02-Up
- 1 1/2" I.D. 1 1/4" O.D. 2.100" Long Spacer (Rt Upper Shock Mount) '09
- 1 1/2" I.D. 1 1/4" O.D. 1.720" Long Spacer (Lt Upper Shock Mount) '09
- 2 Shock Nuts (Upper Shock Mount)
- 4 1/2" I.D. 1" O.D. 1/8" Thick Grd 8 Washer (Shock Mount)

#### SWING ARM / PIVOT SHAFT See Drawing Page ????? **'02-'04**

1 - 1" I.D. 1 1/4" O.D. 1.630" Long Spacer (Rt. Side Pivot Shaft) 1 - 1" I.D. 1 1/4" O.D. 1.380" Long Spacer (Lt. Side Pivot Shaft)

### **'05-'06**

1 - 1" I.D. 1 1/4" O.D. 1.470" Long Spacer (Rt. Side Pivot Shaft) 1 - 1" I.D. 1 1/4" O.D. 1.520" Long Spacer (Rt. Side Pivot Shaft) 2 - 1" I.D. 1 1/4" O.D. 1.470" Long Spacer (Lt. Side Pivot Shaft)

### '09-UP 240 Tire & Muscle

4 - 1" I.D. 1 ¼" O.D. 1.402" Long Spacer (Pivot Shaft)

# WHEEL MOUNTING

### 10 - Lug Nuts



**LOCTITE** is included with every kit and must be used where instructed in this manual.

### STAGE 1. Motorcycle Preperation:

- 1. Secure front wheel so motorcycle won't tip, set jack under the motorcycle and raise the jack to take the weight off of the rear wheel.
- 2. Remove factory exhaust. If you have short exhaust you can leave them attached.

Factory exhaust will not work when converting your bike to a trike.





- 3. Remove upper and lower belt guards.
- 4. Remove Shocks
- 5. Remove axle nut.
- 6. Remove axle from wheel and swing arm.

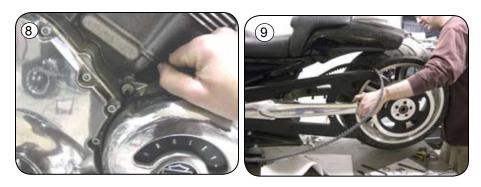


7.Remove banjo bolt and caliper





- 8. Remove pulley cover.
- 9. Raise jack, remove wheel



10.Remove swing arm pivot shaft nut on left side. Pull pivot shaft out on right side. Remove swing arm.





#### STAGE 2. Rear End Preparation/Installation:

- 1. With swing arm and rear wheel removed, have a friend help set a wheel and tire on the brake side of the rear end. Install with lug nuts.
- 2. Set the rear end on the wheel that was previously installed. Remove the five bolts to the spokes, Remove axle, axle housing and star plate as a unit.

Do not remove green tape, it will be used as a reference point in the following instructions.

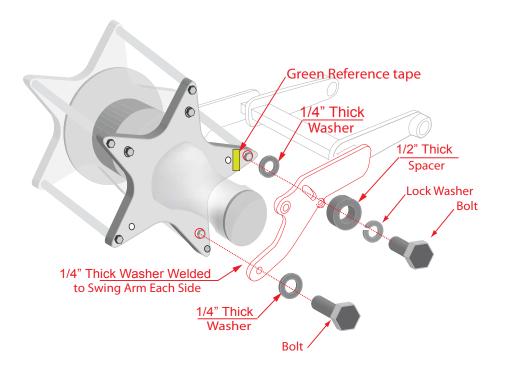


- 3. Insert belt leaving green tape spoke forward.
- 4. Install star plate and axle housing. Line up green tape, Loctitie allen bolts & tourque both sides (60 ft. lbs)





5. Install swing Arm

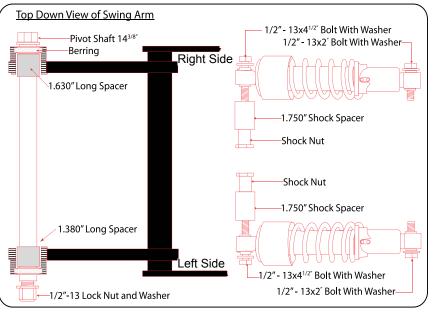


- 6. Install wheel on pulley side of rear end.
- 7. Roll rear end under bike to install pivot shaft. See next page for position of pivot shaft spacers. *please note refer to your year!*

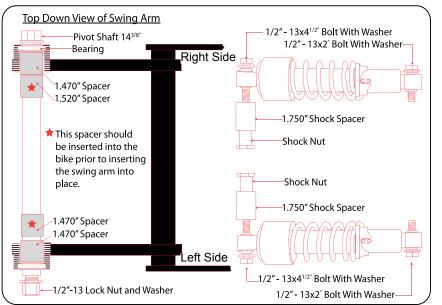




# 2002 -2004



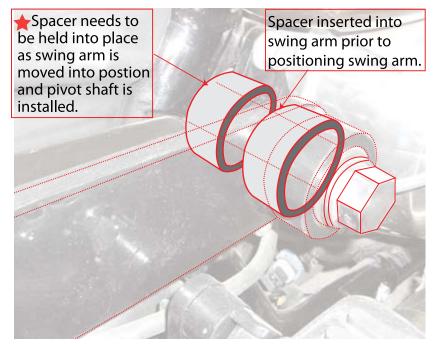
# 2005 -2006



#### Top Down View of Swing Arm 1/2" - 13x4<sup>1/2</sup>" Bolt With Washer -Pivot Shaft 14<sup>1/8"</sup> • 1/2" - 13x2" Bolt With Washer-Bearing Right Side 1.402" Spacer \* 1.402" Spacer 2.100" Shock Spacer This spacer should Shock Nut be inserted into the bike prior to inserting the swing arm into Shock Nut place. 1.720" Shock Spacer 1.402″ Spacer 1.402" Spacer 00 Left Side \_1/2" - 13x4<sup>1/2"</sup> Bolt With Washer -1/2"-13 Lock Nut and Washer 1/2" - 13x2<sup>°</sup> Bolt With Washer-

Use this diagram for swing arms with 2 spacers per side.

2009 240 Tire & Muscle



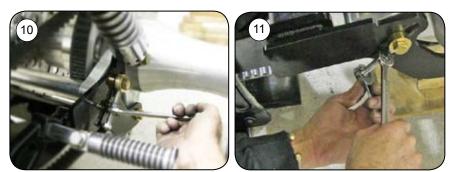
- 8. Raise or lower the jack to install shock. See previous page for shock spacer placement, tourge shock bolts to 50ft lbs.
- 9. Install brake line to rear caliper and bled.



10. Adjust belt tension to factory specs.

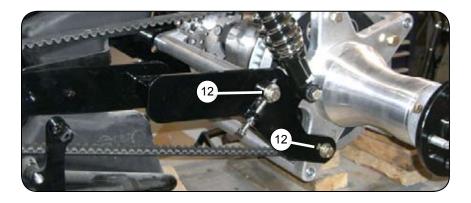
The trike must be sitting on the ground on its suspension to adjust the belt.

11. Tighten jam nut on adjuster bolts.

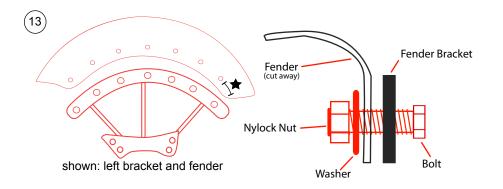


12. Torque the four rear end mounting bolts to 60 ft. lbs.

#### A Shown without wheel and on blocks for photography.



13. Attach fender brackets to fenders using supplied FENDER MOUNTING HARDWARE A Note: side with more space from bolt holes to edge of fender goes toward the front.



14.Remove top two star plate to spoke bolts and two bolts just below bolts previously removed, on one side at a time. Install fender and bracket on the rear end. Apply blue loctite. Install top two star plate bolts. Install lower mounting bolts on fender bracket. Install fender and fender bracket on other side as previously described. Torque upper fender bracket bolts to 60 ft. lbs. Torque lower fender bracket bolts to 60 ft. lbs.



LOCTITE

15. Tighten lug nuts on rear wheels torque 78 to 85 ft. lbs. and go for a ride. Re-torque lug nuts after 25 miles or 100 mile maximum.



Note: Initially the brake and rotor need to be wore in before maximum braking can be achieved. Please use caution.

Our Trike rear ends are made from all 6061 T6 billet aluminum, except for our Sport Trike rear end, which has 3/8" thick steel star plates, powder coated silver, instead of 1" thick billet aluminum star plates that we use on all our other Trike rear ends.

All of our rear ends have a Dana 30 differential, packed with Moly EP grease. 9" Ford street/strip axles with a bolt pattern of 5 studs on 4  $\frac{1}{2}$ " bolt circle, wheel studs are  $\frac{1}{2}$ " -20. HHI/Frankenstein 4 piston billet caliper, 11  $\frac{1}{2}$ " stainless steel brake rotor, or optional outboard Brakes with two HHI/ Frankenstein 4 piston billet calipers and two 11" stainless steel brake rotors.We only use top quality new parts in our manufacturing of "Frankenstein Trikes" rear ends.

# **Replacement Parts**

Differential seal: National oil seal # 481213 \$3.50 each

Differential Bearing: # 62102RS \$15.00 each

Axle Bearing: BCA # RW207-CCRA \$30.00 each

Brake Pads: HHI-101-001 \$29.00 pair

prices subject to change