

CREATE YOUR OWN
MONSTER

FRANKENSTEIN TRIKES™

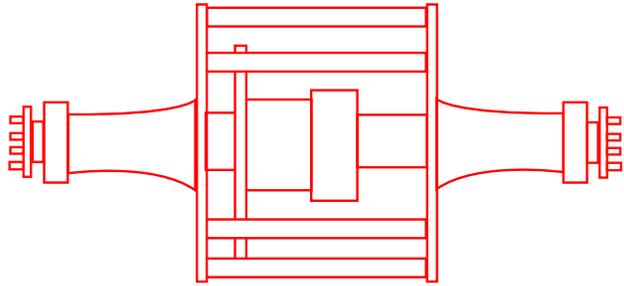
INSTALLATION GUIDE

SPORTSTER 34" SPORT TRIKE KIT

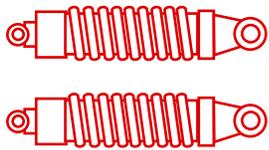


INCLUDED IN YOUR TRIKE KIT:

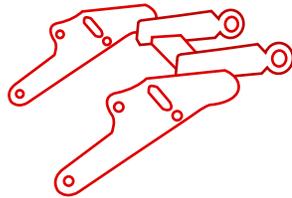
COMPONENTS



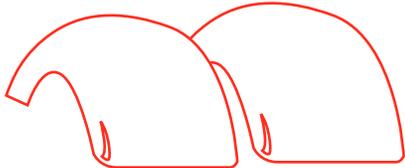
34" Light Sport Rear End



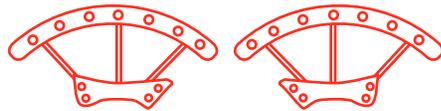
2 Sport Shocks



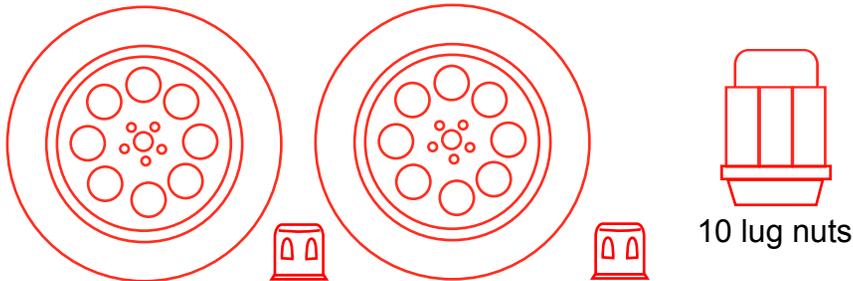
Swing Arm



2 Sport Fenders



2 Fender Brackets



2 American Eagle 15" X 8" wheels style 186
2 Center caps and 2 General Altimax 215/60R15 tires

HARDWARE

PULLEY MOUNTING

- 5 pcs. - 7/16" -14 x 1 1/2" Grd. 8 (Gold) Bolt
- 5 pcs. - 7/16" Lock Washer

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 pre-installed onto the rear end.

SHOCK MOUNTING

NOTE! Depending on the year of your sportster your kit may include one or more of the following.

- 2 - Upper Shock Studs ('91-'99)
- 2 - 1/2" - 13 x 2 1/4" Grd. 8 Bolt (Lower)
- 2 - 1/2" - 13 x 3 1/2" Grd. 8 Bolt (Upper)('04 up)
- 2 - 1/2" - 13 x 4" Grd. 8 Bolt (Upper)('00-'03)
- 4 - 1/2" I.D. 1" O.D. 1/8" Thick Grd 8 Washer
- 2 - 1/2" I.D. 1 1/4" O.D. 1" Long Spacer (Upper)('04up)
- 2 - 1/2" I.D. 1 1/4" O.D. 1 3/4" Long Spacer (Upper)('00-'03)

WHEEL MOUNTING

- 10 - Lug Nuts



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

STAGE 1. Motorcycle Preparation:

Shown - 2004 Sportster your bike may vary depending on the year

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 upper and lower belt guards.
3. Loosen axle adjusters on both sides.

8. Remove the allen bolt that holds the rear brake master cylinder reservoir, let the reservoir hang out of the way.



4. Remove axle from wheel and swing arm. Slide the belt off of the pulley.
5. Raise the jack high enough to remove the rear wheel.
6. Remove front pulley cover.
7. Remove both shocks from the motorcycle.

9. Remove swing arm pivot bolt on both sides. Remove swing arm.



FRANKENSTEIN TRIKES

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. If your Sportster is 1999 and down, take your pulley and differential spacer to a machine shop. Have them measure the thickness of your pulley and remove that amount from the differential spacer. If your Sportster is 2000 and up go to next step.

4. Install Pulley. Install 7/16" pulley bolts with lock washers provided apply blue loctite and torque the pulley bolts. Have friend help hold the center section of the rear end with a screw driver through a hole in the rotor through one of the holes in the star plate. Torque the pulley bolts 55 to 65 ft. lbs. Install belt over pulley as shown, the belt should be inside of all spokes except the one that is marked with the green tape.



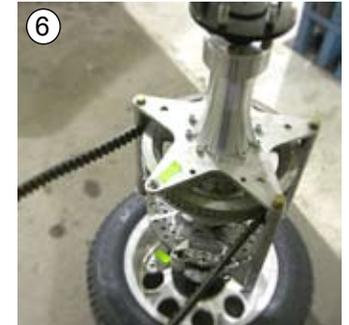
5. Remove spoke that is marked with the green tape. Install spacer on spigot of the differential housing.
6. Install axle, axle housing and star plate as a unit, Line up points of the star plate with the green tape. Install bolts through star plate to the spokes.



shown '00 and up

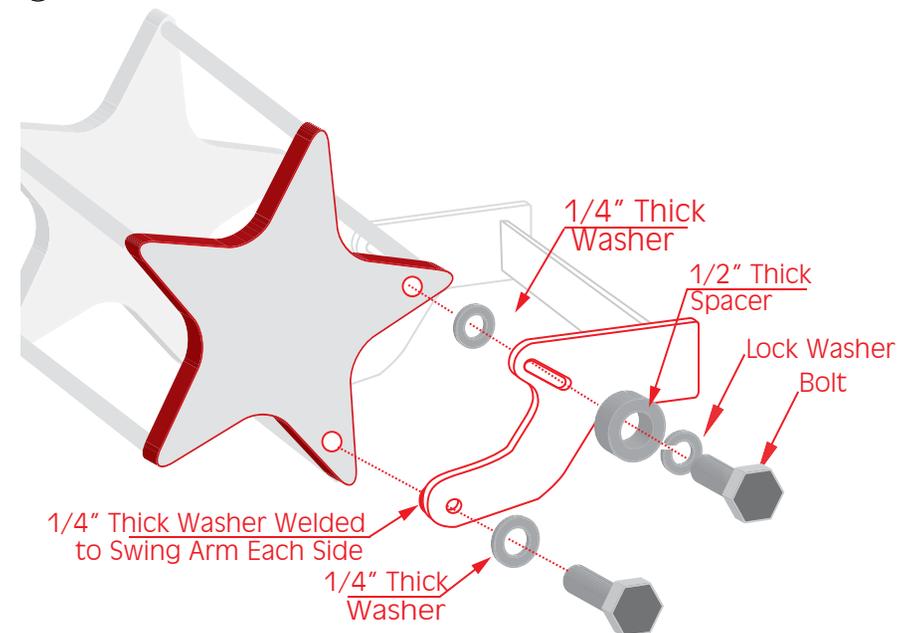


shown '99 and down



7. Install swing arm on rear end. Refer to diagram for placement of washers and spacers.

⑦



8. Have a friend help hold the swing arm. Install spoke previously removed as shown. Do not tighten the bolts that mount the swing arm to the rear end.



9. Install other wheel and tire on the axle. Install with lug nuts.

10. Roll the rear end and position it behind the bike.



11. Install swing arm pivot shaft and allen bolt ('03 and down) or pivot bolts ('04 and up) apply loctite.



12. Slide belt over front pulley. On '03 and down have a friend help hold allen wrench and torque pivot shaft. On '04 and up torque pivot bolts.

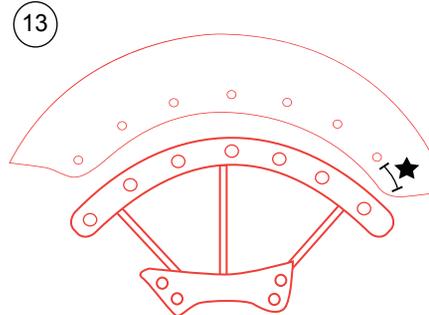
YEAR	ft.-lb.
'79-'03	50
'04-UP	60-70



13. Attach fender brackets to fenders using supplied FENDER MOUNTING HARDWARE ★ *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 and lock nuts 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 and lock nuts on fender bracket. Install fender and fender bracket on other side as previously described. Torque upper fender bracket bolts to 60 ft. lbs hold spoke with adjustable wrench on flat area of spoke. Torque lower fender bracket bolts to 60 ft. lbs.

Note: brackets are marked Left (L) and Right



shown: left bracket and fender



15. Remove remaining star plate bolts one at a time apply blue loctite and hold adjustable wrench on flat area of spoke to torque bolts to 60 ft. Lbs.

⚠ Do not torque front spoke at this time.

16. If your Sportster is 1999 and down remove upper shock stud. Install longer shock stud provided, install shocks. If your Sportster is 2000 and up install shocks with the provided shock mounting hardware. Torque shock bolts.



Shock bolts - Torque specs...

YEAR	ft.-lb.
'86-'92 UPPER	21-27
'93-'99 UPPER	21-35
'00-'UP UPPER	45-50
ALL LOWER	55

17. Adjust belt tension to factory specs.

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

NOTES:



18. Tighten jam nut on adjuster bolts.



19. Torque the four rear end mounting bolts to 60 ft. lbs. hold adjustable wrench on flat area.

20. Install front pulley cover. Install the allen bolt that holds the rear brake master cylinder reservoir, hook up stock brake line, bleed rear brake, 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.



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