

Tools Needed

Transmission jack
Hand held calculator
Mechanics hand tools
Torque wrench (up to 250 lb.-ft)
½" heavy duty drill or frame drill
Tape measure
Straight edge
Electronic Angle meter (Spicer Anglemaster II)

Chassis preparation

ONLY AFTER ALL MEASUREMENTS HAVE BEEN TAKEN.
Remove any components in the chassis that may interfere with the retarder and/or mounting hardware.

Information Needed

Installation drawing

Parts needed

Telma unit
2 flange yokes
Mounting kit TIK03000

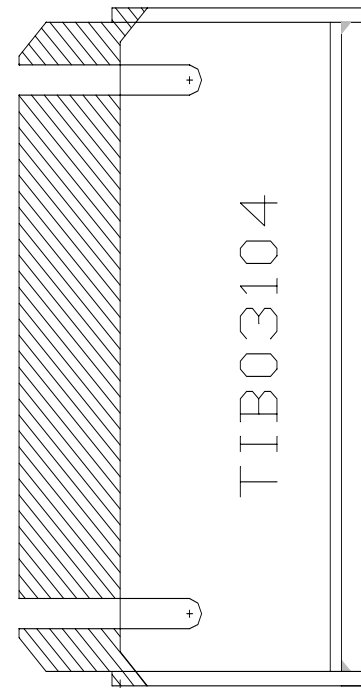
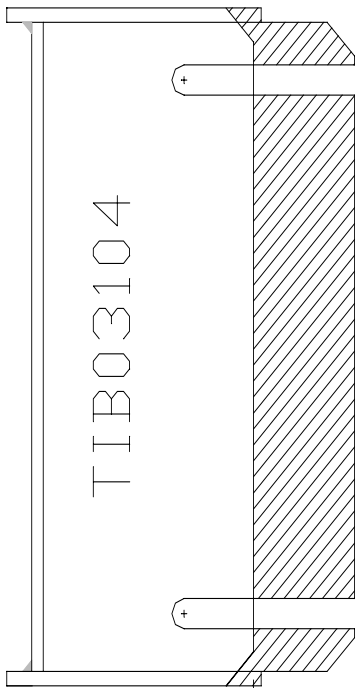
TIK03000 Includes:

PART NUMBER	DESCRIPTION	QUANTITY
TIB03104	CHASSIS BRACKET	2
TIB03105	LEFT SIDE PLATE	1
TIB03106	RIGHT SIDE PLATE	1
TIB03107	1/4" x 2" SQUARE WASHER	4
JZ100723	TELMA MOUNT SET	1
JZ100280	SIDE PLATE FASTENERS	1
JZ100110	VENT TUBE EXTENSION	1
TIF05025	HEX FLANGE CAP SCREW 5/8-18UNF X 2"	10
TIF05026	GRIP FLANGE LOCK NUT 5/8-18UNF	10

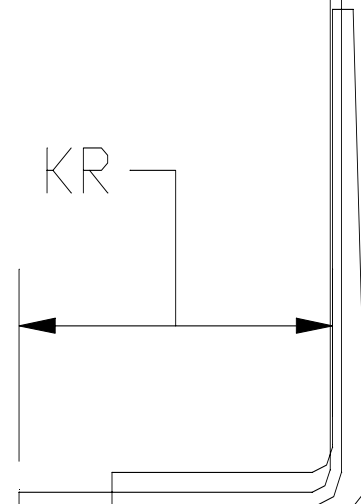
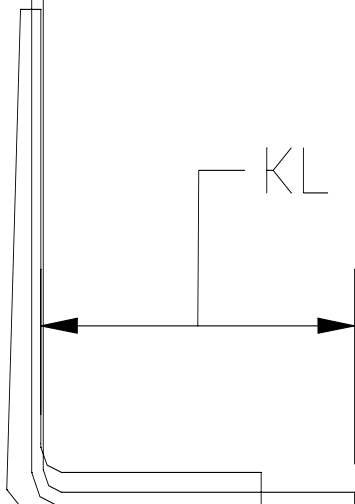
Step 1: Trim the short side of each chassis bracket to the dimension KL and KR. This will be found in the installation drawing. Make a $\frac{3}{4}$ " chamfer on the corners of the trimmed bracket.

DRIVER SIDE
(LEFT)

PASSENGER SIDE
(RIGHT)



$\frac{3}{4}$ CHAMFER 45°



Step 2: Locate the measurements for the reference hole from the installation drawing. The CC1 measurement is from the center of the transmission u-joint to the center of the reference hole. The T1 measurement is from the top of the frame rail to the center of the reference hole. Drill a 5/8" reference hole at dimension CC1 and T1.

Align the reference hole drilled in the chassis bracket with the reference hole in the frame and assemble with a 5/8 bolt.

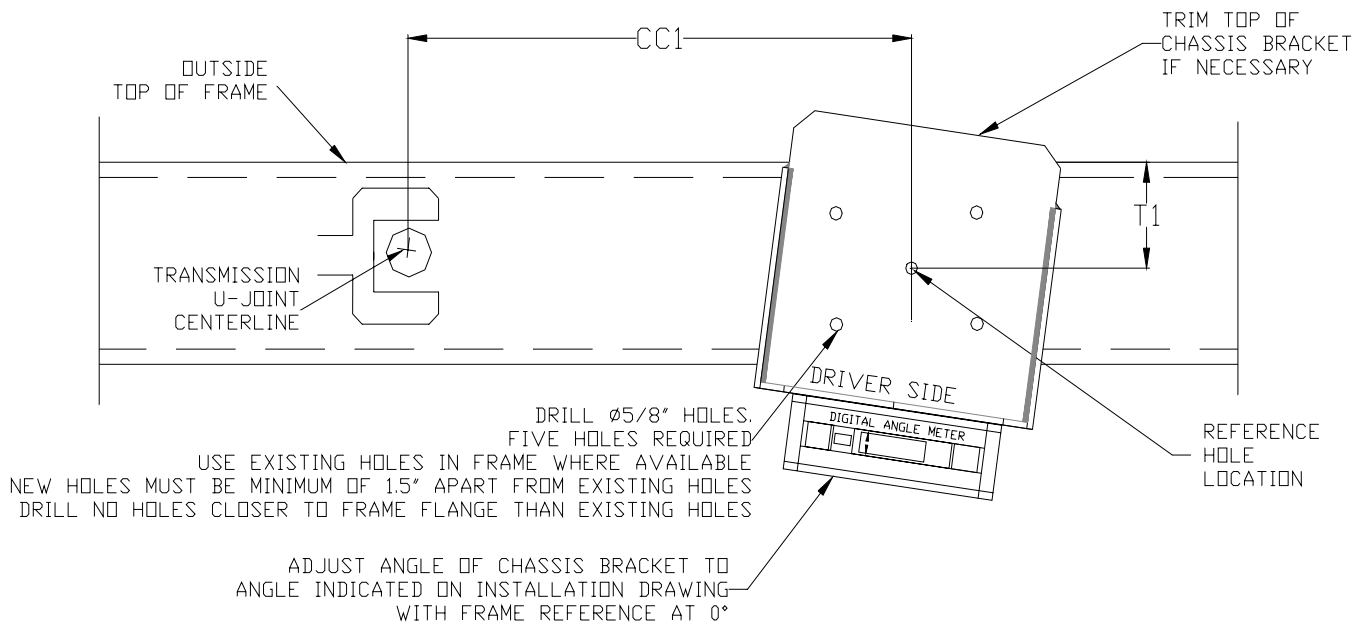
Adjust the angle of the bracket to the angle indicated on the installation drawing with the frame reference of 0 and then tighten the bolt. Note the chassis bracket angle may be positive or negative.

Drill 4 remaining holes in the bracket and secure with bolts.

Use existing holes in frame where available.

New holes must be a minimum of 1 1/2" apart from existing holes.

Do not drill any holes closer to frame flange than existing holes. Tighten mounting bolts to 150 ft-lb.



Recheck chassis bracket angle after bolts are installed and tightened.

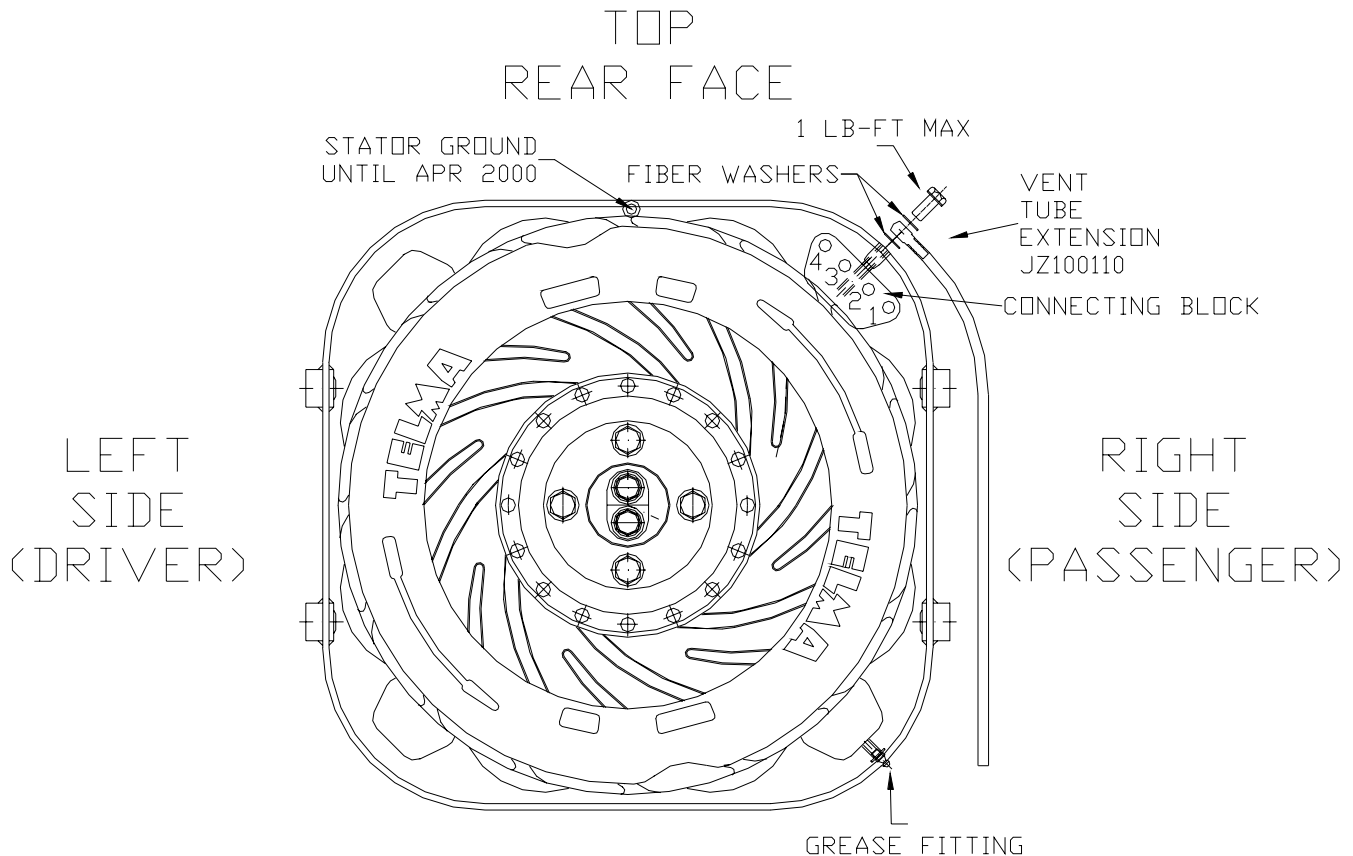
STEP 3

Remove the TELMA from the crate. Make sure the vent tube is on top. The connecting block (where the power wires attach) is located at the top right rear corner. The ground terminal is located at the top left front corner. A red arrow on the left side should face toward the rear axle when installed in the chassis.

Install the vent tube extension JZ100110 included

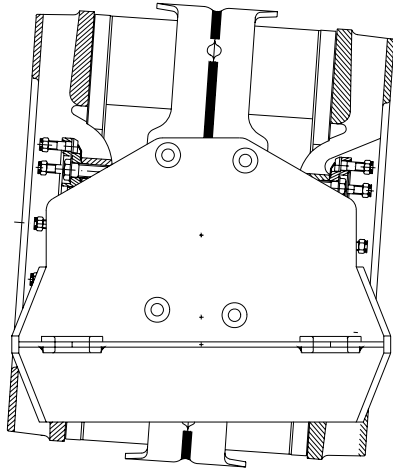
Install the flange yokes on the flanges of the TELMA unit. If flange nuts are not supplied, you will need to obtain 3/8-24UNF all metal lock nuts to install the flange yokes. Make sure the yokes line up in the same plane.

Tighten all nuts to specified torque

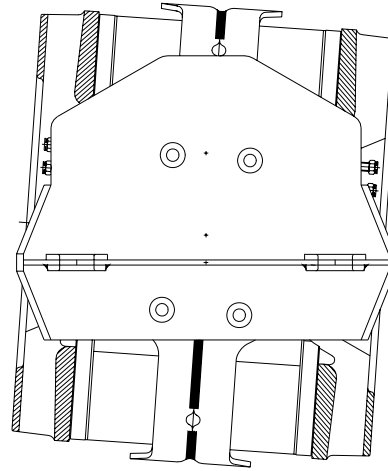


STEP 4

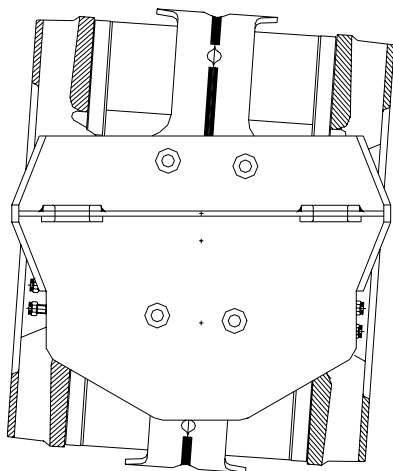
Locate the correct mounting position for the side plates. Refer to your installation drawing.



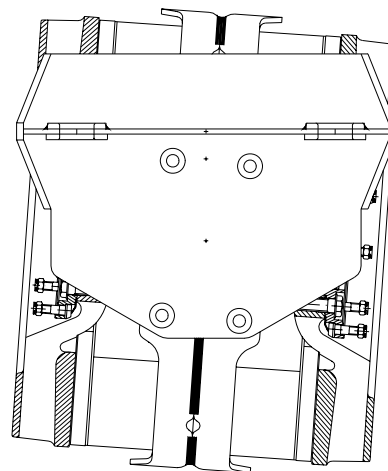
POSITION 1



POSITION 2



POSITION 3



POSITION 4

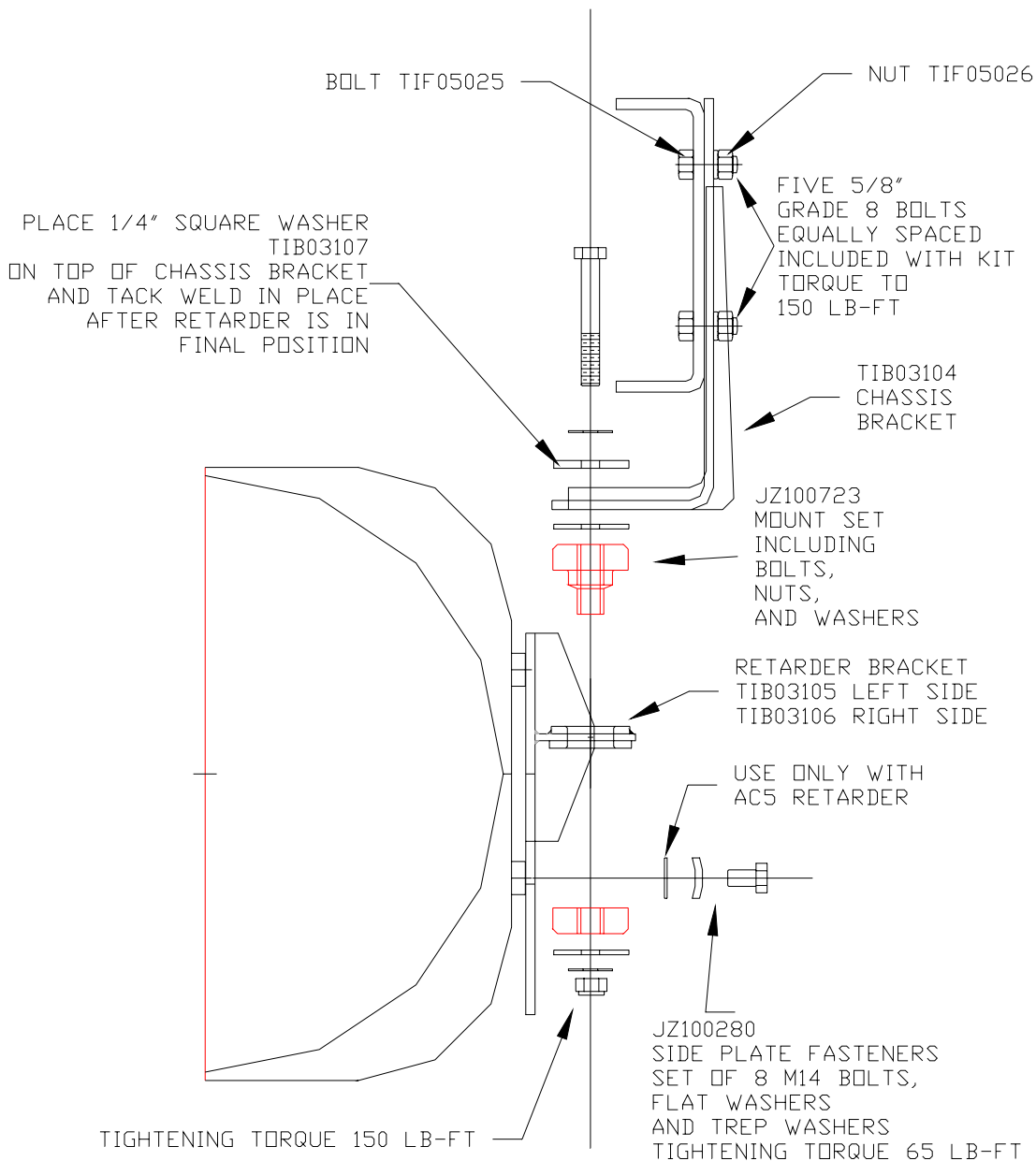
Install the brackets onto the retarder. Use fastener kit JZ100280. The flat washers included in the set are used for AC5 series retarder only. TIB03105 is the left (driver) side retarder bracket. TIB03106 is the right (passenger) side retarder bracket. Tighten the side plate bolts to 65 lb-ft.

STEP 5

Lift the retarder on to a transmission jack and position it under the vehicle between the frame rails.

Install the top half of the mounts with one large flat washer on top of each mount. Lift retarder into position. Place the 1/4" square washer and the spring washer on the topside of the chassis bracket and then insert bolt.

Install the lower portion of the mounts with a large flat washer, spring washer and then the nut. Tighten mount nut to 150 ft-lb



After you tighten the mounts, tack weld the square washer in place on the chassis bracket.

STEP 6

Take measurements for driveline lengths; refer to the installation drawing L1 and L2. Measurements should be close if the installation is correct.

STEP 7

Install drivelines

STEP 8

Measure drive shaft angles and compare to angles indicated on the installation drawing. Measurements should be close if the installation is correct.