



Parts List

Ref #	Part #	Qty	Description
1	21581	1	Pushplate - Dr. Side
2	21582	1	Pushplate - Pass Side
3	8661	1	Angle Brace
	21413	1	Bolt Bag for 7149 – includes the following parts:
4	90106	4	3/8-16 x 1-1/4" Gr.5 Cap Screw
5	90315	4	3/8" Plain Washer
6	90361	4	3/8" Split Lock Washer
7	90334	4	3/8"-16 Nut
10	90364	4	1/2" Split Lock Washer
11	90337	4	1/2"-13 Nut
12	90636	4	M10 x 1.50 x 40 Gr. 10.9 Cap Screw
13	90420	4	M10 Plain Washer
17	90355	2	1/2"-13 Locknut
59	8324	4	Hose Tie-3/16 x 14"
62	90615	4	1/4-20 x 1/2" (NC) Gr.5 Cap Screw
63	90350	4	1/4"-20 (NC) Locknut
75	3666	4	Hose Tie - 3/16 x 8"
83	90461	4	1/4-20 x 3/4" (NC) Gr. 5 Cap Screw
85	90359	4	1/4" Lock Washer
86	90330	4	1/4"-20 (NC) Nut
87	90311	4	1/4" Flat Washer
	21589	1	Bracket Bag for 7149 – incl. the following parts
8	8879	4	1/2-13 x 1-1/4" Gr.5 Cap Screw With Handle
15	21583	2	Backing Plate
16	21590	2	1/2-13 x 1-1/2" Gr.5 Cap Screw plain with handle
61	8914	2	Grille Bracket

NC FASTENER TORQUE (FT-LB)			
DIAMETER- THREADS PER INCH	GRADE		
	G2	G5	G8
1/4 - 20	6	9	13
5/16 - 18	11	18	28
3/8 - 16	19	31	46
7/16 - 14	30	50	75
1/2 - 13	45	75	115
9/16 - 12	66	110	165
5/8 - 11	93	150	225
3/4 - 10	150	250	370
7/8 - 9	150	378	591
1 - 8	220	583	893

1. Remove the frame brackets from the sway bar and discard the fasteners. Remove and save the two forward bumper bracket bolts on the clips from both sides of the vehicle. Remove and save the two lower steering box bolts from the driver-side of the frame.
2. Place a backing plate (15) on each side of cross member up through lower slot before installing pushplate. Place the driver-side pushplate (1) with top front bars straddling the frame. Place the two forward bumper bracket bolts on clips back through pushplate hanger and bumper bracket. Install nuts but do not tighten fasteners at this time. Re-install both steering box bolts. Place a 1/2 x 1-1/2" cap screw with short handle (16) through round hole in back of cross member, picking up the backing plate and placing the cap screw through the backing plate, cross member and pushplate bar. Secure with one 1/2" locknut (11).
3. Insert a 1/2 x 1-1/2" cap screw with handle (8) through the large hole in the frame at the back of the pushplate. Bend the handle as necessary. Insert the cap screw out through the frame and rear hole of pushplate. Fasten with 1/2" lock washer (10) and nut (11).
4. Repeat steps #2 and #3 for the passenger-side pushplate (2), except for the top hole on side plate. Insert a 1/2 x 1-1/2" cap screw with handle (8) in through the square hole with the bumper brace attached and out through frame and top hole in rear side plate on pushplate. Fasten with 1/2" lock washer (10) and nut (11).

5. Reattach the sway bar brackets to the pushplates and frame with four M10 x 1.5 x 40 cap screws (12) and flat washers (13). Install the angle brace (3), with the leg on the bottom facing the rear, to the back of the inner tabs on the pushplate. Attach to the pushplates from front to rear of vehicle with four 3/8 x 1-1/4" cap crews (4), flat washers (5), lock washers (6) and nuts (7). Measure the distance between the connecting pin doublers. The distance should be 29-1/8" from center to center. A second measurement must be taken further back on the arms to ensure they are parallel.
6. Tighten the sway bar bolts first, the steering box bolts second and then all remaining fasteners. Use the two rear holes on the passenger-side pushplate as guides to drill two 17/32" holes through the frame. Bend the handles as needed. Install two 1/2 x 1-1/2" cap screws with handle (8) through frame using the two large holes behind the pushplate. The rear sway bar fastener may have to be loosened to get the forward cap screw in. Attach with two 1/2" lock washers (10) and nuts (11). Bend the handles on all cap screws with handles to prevent contact with any vehicle components.

Grille Bracket Installation

A. For vehicles with under-hood hydraulics:

Install the grille brackets according to the peculiar hydraulic installation instructions.

B. For vehicles with out-front hydraulics:

Install grille brackets and panel mounts as follows:

Place a grille bracket (61) on back of the short panel mount as shown in the illustration below. Attach with two 1/4 x 1/2" cap screws (62) and locknuts (63). Position both grille brackets outwards in the large bumper openings against the bumper brackets. For trucks with gasoline engines (battery on driver side only) install both grille brackets in the large bumper opening on the driver side of the vehicle. For trucks with diesel engines (battery on passenger side) install one grille bracket on the driver side, and one on the passenger side. Insert four 1/4 x 3/4" cap screws (83) with flat washers (87) down through the bumper and bracket, using the holes in the grille brackets as guides for drilling. Fasten with four lock washers (85), and nuts (86).

