




REF#	PART#	QTY	DESCRIPTION	* PART OF 7990 BOLT BAG
1	1511	1	PUSHBEAM (28-7/8 OAL)	
2	7992	1	PUSHPLATE, PASSENGER'S SIDE	
3	7993	1	PUSHPLATE, DRIVER'S SIDE	
4	7969	2	HEADGEAR BRACE	
5	5005	2 *	5/8-11 X 1-1/2 (NC) DRILLED CAPSCREW	
6	90446	2 *	5/8 (NC) SLOTTED NUT	
7				
8	90343	2 *	5/8 (NC) NUT	
9	90366	2 *	5/8 LOCKWASHER	
10	90323	2 *	5/8 FLATWASHER	
11	90576	2 *	5/8 FLATWASHER GR.8	
12	90214	4 *	1/2-13 X 1-3/4 (NC) GR.5 CAPSCREW	
13	90210	4 *	1/2-13 X 1-1/2 (NC) GR.5 CAPSCREW	
14	90575	6 *	1/2-13 X 1-1/4 (NC) GR.5 CAPSCREW	
15	90337	18 *	1/2-13 (NC) NUT	
16	90364	18 *	1/2 LOCKWASHER	
17	90319	8 *	1/2 FLATWASHER	
18	90012	2 *	3/16 X 1-3/4 COTTER PIN	
19	4289	2 *	3/4 X 1-7/8 MACHINE PIN	
20	90658	2 *	5/32 X 1-1/4 COTTER PIN	
21	6920	2	CONNECTING PIN ASSEMBLY	
22	6815	2	CONNECTING PIN W/HANDLE	
23	821	2 *	SPRING	
24	90601	2 *	1/4 X 1-1/2 COTTER PIN	
25	3	1	CONNECTING PIN RELEASE	
26	5528	1	CYLINDER PROTECTOR	
27				
28				
29	7988	1 *	5/8-11 X 1-1/2 (NC) GR.5 W/ HANDLE	
30	7989	1 *	5/8-11 X 1-1/2 (NC) GR.5 W/ BENT HANDLE	
31	90665	4 *	1/2-13 X 1-1/4 (NC) GR.2 SOCKET HD CS	
32				
33				
34				
35				
36				
37				
38				
39				
	7991	1	DASH BRACKET BAG	

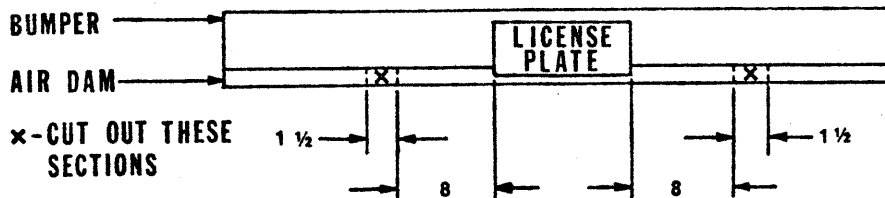
FASTENER TORQUE (FT-LB)			
DIAMETER- THREADS PER INCH	GRADE DESIGNATION		
	 GRADE 2	 GRADE 5	 GRADE 8
1/4 - 20	6	9	13
5/16 - 18	11	18	28
3/8 - 16	19	31	46
7/16 - 14	30	50	75
1/2 - 13	45	75	115
9/16 - 12	66	110	165
5/8 - 11	93	150	225
3/4 - 10	150	250	370
7/8 - 9	150	378	591
1 - 8	220	583	893

IMPORTANT NOTICES

1. FISHER ENGINEERING MAKES THE FOLLOWING RESTRICTIONS FOR THIS KIT IN ACCORDANCE WITH FORD MOTOR COMPANY'S MINIMUM RECOMMENDED VEHICLE EQUIPMENT FOR A SNOWPLOW INSTALLATION. PECULIAR ATTACHMENT GROUP 7113 IS DESIGNED ONLY FOR USE ON THE FOLLOWING VEHICLES:
 - A. **F150 PICKUPS WITH HEAVY DUTY FRONT SUSPENSION - 3800 LB. FRONT GAWR.**
 - B. **BRONCOS WITH HEAVY DUTY FRONT SUSPENSION - 3800 LB. FRONT GAWR.**

2. **VEHICLE LOADING REQUIREMENTS:**
 - A. THE TOTAL VEHICLE CURB WEIGHT MUST NOT EXCEED THE GROSS VEHICLE WEIGHT (GVW) OR CAUSE EITHER THE FRONT OR REAR GROSS AXLE WEIGHT RATING (GAWR) TO BE EXCEEDED. THE GVW AND GAWR ARE SPECIFIED ON THE SAFETY COMPLIANCE CERTIFICATION LABEL AFFIXED TO THE VEHICLE. THE VEHICLE CURB WEIGHT INCLUDES ALL AFTER MARKET ACCESSORIES, THE SNOWPLOW SYSTEM INCLUDING THE BLADE, THE VEHICLE OCCUPANTS AND THE CARGO.
 - B.
 1. NO MORE THAT 63 PERCENT OF THE TOTAL VEHICLE CURB WEIGHT SHOULD BE SUPPORTED BY THE FRONT AXLE.
 2. IF NECESSARY, WEIGHT SHOULD BE SECURELY ATTACHED TOWARD THE REAR OF THE VEHICLE TO OBTAIN THIS BALANCE FOR PURPOSES OF COMPLYING WITH FEDERAL MOTOR VEHICLE HYDRAULIC BRAKING STANDARDS.

A. CUT SLOTS IN AIR DAM AS PER ILLUSTRATION.



SAW OR CUT OFF 3/4" TO 1" OF PINS ON BOTTOM OF FRAME ABOUT 22" BACK OF BUMPER.

- B. **BRONCO VEHICLES:** REMOVE SWAY BAR AND BRACKETS FROM VEHICLE. PLACE BOLTING BARS INTO HOLE LOCATIONS ON PUSHPLATES. INSTALL DRIVERS SIDE PUSHPLATE. GUIDE SWAY BAR THROUGH BOTH PUSHPLATES BEFORE COMPLETELY INSTALLING PUSHPLATE ON PASSENGER SIDE. REATTACH SWAY BAR AND BRACKETS.

- C. ON DRIVER'S SIDE, REMOVE NUTS ON BRACKET HOLDING BUMPER. REMOVE BRACKET HOLDING CAPSCREWS SO CAPSCREWS CAN BE REMOVED. REINSTALL BRACKET. REMOVE STABILIZER BAR AND BRACKETS. SAVE FASTENERS. (REINSTALL AFTER ATTACHMENTS ARE ALL INSTALLED.) INSTALL TWO 1/2" X 1-3/4" CAPSCREWS GR.5 (NC) (12) WITH 1/2" FLATWASHERS (17) OUT THROUGH BUMPER AND FRAME BRACKETS. PLACE FRONT HANGER OF PUSHPLATE (3) TO BACK OF BUMPER HANGER AND FASTEN WITH TWO 1/2" FLATWASHERS (17), LOCKWASHERS (16) AND NUTS (NC) (15). DO NOT TIGHTEN ANY FASTENERS UNTIL STEP "I". PLACE 5/8" X 1-1/2" GR.5

CAPSCREW WITH BENT HANDLE (30) AND GR.8 FLATWASHER (11) THROUGH SQUARE HOLE IN FRONT OF SHOCK TOWER. PLACING CAPSCREW OUT THROUGH SLOTTED HOLE IN FRAME AND REAR HOLE OF PUSHPLATE (3). FASTEN WITH 5/8" LOCKWASHER (9) AND NUT (NC) (8).

- D. REPEAT SAME WITH PASSENGER'S SIDE PUSHPLATE (2).
- E. ASSEMBLE CONNECTING PINS (21) TO PUSHBEAM (1). FIRST INSERT SPRINGS (23) BETWEEN TWO INNER EARS ON EACH SIDE OF PUSHBEAM (1). THEN INSERT CONNECTING PIN (22) THROUGH ALL THREE EARS WITH HANDLE OF PIN TOWARDS THE CENTER OF THE BEAM. LEAVING THE HOLE IN THE PIN BETWEEN THE INNER TWO EARS. PULL BACK ON SPRING AND INSTALL COTTER PIN (24).
- F. PLACE THE PUSHBEAM (1) BETWEEN THE TWO PUSHPLATES AND INSTALL THE TWO 5/8 X 1-1/2 DRILLED CAPSCREWS (5) OUT THROUGH THE PUSHBEAM AND PUSHPLATES. SECURE WITH 5/8" SLOTTED NUTS (6).
- G. PLACE HEADGEAR (FROM COMMON ATTACHMENTS) INTO MOUNTING PADS ON FRONT OF PUSHPLATES. INSTALL TWO 1/2 X 1-1/4 CAPSCREWS (14) DOWN THROUGH HEADGEAR AND PADS. SECURE WITH 1/2" LOCKWASHERS (16) AND NUTS (NC) (15).
- H. PLACE THE BENT END OF HEADGEAR BRACE (4) TO MIDDLE HOLE OF HEADGEAR AND FASTEN WITH ONE 1/2 X 1-1/2 CAPSCREW (13) AND SECURE WITH ONE 1/2 LOCKWASHER (16) AND NUT (NC) (15). DO THE SAME WITH BOTTOM OF HEADGEAR BRACE TO PUSHPLATE TAB. DO THIS ON BOTH SIDES OF THE HEADGEAR.
- I. CHECK IF THERE IS A GAP BETWEEN STABILIZER BRACKET ON FRAME AND PUSHPLATE. IF THERE IS, SHIM WITH 5/8" FLATWASHER (10) AND FASTEN WITH ONE 1/2 X 1-1/4 CAPSCREW GR.5 (NC) (14), SECURE WITH A 1/2" LOCKWASHER (16) AND NUT (NC) (15). IF WASHER IS NEEDED, DO ON BOTH PUSHPLATES TO KEEP HEADGEAR LEVEL.
- J. START TIGHTENING FASTENERS, BEAM BOLTS FIRST. THEN INSTALL 3/16 X 1-3/4 COTTER PINS TO BEAM BOLTS. LIFTING THE BUMPER, START TIGHTENING HANGER FASTENERS, REAR FASTENERS AND STABILIZER BAR FASTENERS. THEN TIGHTEN HEADGEAR AND HEADGEAR BRACES FASTENERS.
- K. AFTER ALL FASTENERS ARE TIGHT, ON DRIVER'S SIDE PUSHPLATE USING HOLES ON SIDE OF REAR PLATE AS A DRILL GUIDE, DRILL TWO 17/32" HOLES THROUGH BOTH FRAME WALLS. ON INSIDE WALL OF FRAME, BACK DRILL THESE HOLES TO 3/4". PLACE 1/2 X 1-1/4 SOCKET HEAD CAPSCREWS (31) OUT THROUGH HOLES AND FASTEN WITH TWO 1/2" LOCKWASHERS (16), AND NUTS (15). **TIGHTEN.** REPEAT ON PASSENGER'S SIDE PUSHPLATE.
- L. INSTALL CYLINDER PROTECTOR (26) ON BOTTOM OF HEADGEAR BETWEEN PUSHPLATES, WITH ANGLE FORWARD. FASTEN WITH TWO 1/2 X 1-1/4 GR.5 (NC) CAPSCREWS (14), LOCKWASHERS (16), AND NUTS (15). **TIGHTEN.**
- M. THREAD STABILIZER BAR THROUGH PUSHPLATES AND ATTACH. MOUNTS WITH PREVIOUSLY REMOVED FASTENERS TO HOLES IN PUSHPLATES. **TIGHTEN.**