

Drag Pro Undercarriage for Various Trucks

Part No. RPL21670—Serial No. 400000000 and Up

Installation Instructions

BOSS Products limited consumer warranty and BOSS Products commercial warranty policies are located at www.BOSSPlow.com.

Patents pending.

Safety

- Always follow the vehicle manufacturer's recommendations relating to system installation.
 For recommended vehicle models, refer to the BOSS Snowplow Application Chart and Selection Guide.
- Never disable, remove, or relocate any sensors or other components related to the operation of the air bags.
- To comply with federal regulations and to assure a safe vehicle, do not exceed the front gross-axle-weight rating (FGAWR), rear gross-axle-weight rating (RGAWR), and the gross-vehicle-weight rating (GVWR) at any time.
- Due to the variety of equipment that you can install on the vehicle and undercarriage, do not exceed the front gross-axle-weight rating (FGAWR), rear gross-axle-weight rating (RGAWR), and the gross-vehicle-weight rating (GVWR) at any time. This may require weighing the vehicle and adding ballast as necessary. It may also limit the payload capacity of the vehicle.

Installation

Determine the left and right sides of the machine from the normal operating position.

For 1988 through 1999 Chevrolet and GMC Classic Body Style Trucks

Part	Quantity
Sideplate A	1
Sideplate B	1
Bolt (M12)	2
Split lockwasher (1/2 inch)	2
Washer (1/2 inch)	2
Shim (3/8 inch) (optional)	4
Bolt (5/8 x 2 inches)	2
Shim (1/4 inch)	2
Washer (5/8 inch)	2
Nylon locknut (5/8 inch)	2
Pushbeam	1
Bolt (1/2 inch)	8
Nylon locknut (1/2 inch)	8

You may need to loosen or remove the spare tire to complete the installation.

- 1. Park the machine on a level surface, shut off the engine, wait for all moving parts to stop, engage the parking brake, and remove the key.
- 2. If your vehicle has a hitch, remove it and retain the hardware.
- 3. Remove and discard the 12 mm bolts on the rear of the vehicle frame. If your vehicle has an 8mm bolt on the passenger side, remove it and install the bolt with the head on the bottom of the vehicle frame.
- 4. Loosely secure the rear of the sideplates to the vehicle frame using a bolt (M12), split lockwasher (1/2 inch), and washer (1/2 inch) as shown in Figure 2. Use slot 2 on the sideplate if you are installing the kit on a short bed truck,

and slot 1 if you are installing it on a long bed truck (Figure 1).

Note: If your vehicle frame has rivets on the bottom, install a shim (3/8 inch) between the frame and the sideplate as shown in Figure 2.

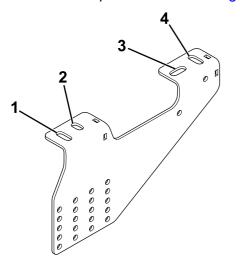


Figure 1

- 1. Slot 1
- 2. Slot 2

3. Slot 3

g259633

- 4. Slot 4
- 5. Loosely secure the front of the sideplates to the vehicle frame using a bolt (5/8 x 2 inches), shim (1/4 inch), washer (5/8 inch), and nylon locknut (5/8 inch) as shown in Figure 2. You may need to drill out the holes in the frame. Use slot 4 on the sideplate if you are installing the kit on a short bed truck, and slot 3 if you are installing it on a long bed truck (Figure 1).

Note: If your vehicle frame has rivets on the bottom, install a shim (3/8 inch) between the frame and the sideplate as shown in Figure 2.

6. Loosely secure the pushbeam to the sideplates using 8 bolts (1/2 inch) and nylon locknuts (1/2 inch) as shown in Figure 2.

Note: Refer to your plow *Owner's Manual* for the appropriate pushbeam height.

- 7. Torque all the fasteners to the following specifications:
 - M12 bolts to 96 N·m (71 ft-lb)
 - 5/8-inch bolts to 153 N·m (113 ft-lb)
 - 1/2-inch bolts to 76 N·m (56 ft-lb)

Note: Refer to your vehicle manufacturer for torque specifications of existing hardware.

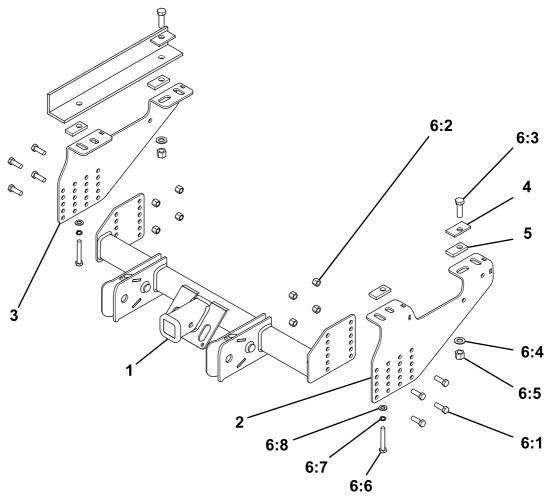


Figure 2
1988 through 1999 Chevrolet and GMC Classic Body Style Parts

g259629

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	RPL21671	1	WLDMNT, PUSHBEAM,	6:3	HDW01731	2	HHCS, 5/8-11 X 2, GR5, YZN
2	TGS05908	1	SUPPORT PLT ASM A,	6:4	HDW01726	2	WASHER, 5/8 FLAT HARDEN, YZN
			HITCH, TGS	6:5	HDW05619	2	NUT, 5/8-11, NYL INS, YZN
3	TGS05910	1	SUPPORT PLT ASM B, HITCH, TGS	6:6	HDW05916	2	HHCS, M12-1.75 X 80MM, 10.9, YZN
4	TGS05919	2	SHIM, 1/4 PLT, 11/16 HOLE,TGS	6:7	HDW01732	2	WASHER, 1/2, SPLIT LOCK, YZN
5	TGS05918	4	SHIM, 3/8 PLT, 11/16 HOLE,TGS	6:8	HDW01729	2	WASHER, 1/2, F436 HARD, F/W, YZN
6	TGS05911	1	FASTENER KIT, UNIV HITCH, TGS				1770, 1210
6:1	HDW01728	8	HHCS, 1/2-13 X 1-1/2, NC, GR5, YZN				
6:2	HDW01748	8	NUT, 1/2-13, NYL INS, YZN				

For 1999 Through 2006 Chevrolet and GMC Trucks

Part	Quantity
Sideplate A	1
Sideplate B	1
Washer (5/8 inch)	4
Bolt (5/8 x 2 inches)	2
Shim (1/4 inch)	2
Nylon locknut (5/8 inch)	2
Pushbeam	1
Bolt (1/2 inch)	8
Nylon locknut (1/2 inch)	8

You may need to loosen or remove the spare tire to complete the installation.

- 1. Park the machine on a level surface, shut off the engine, wait for all moving parts to stop, engage the parking brake, and remove the key.
- 2. If your vehicle has a hitch, remove it and retain the hardware.
- 3. Remove and retain the 14 mm bolts on the rear of the vehicle frame.
- Loosely secure the rear of the sideplates to the vehicle frame using a previously removed bolt and a new washer (5/8 inch) as shown in Figure 3.
- 5. Loosely secure the front of the sideplates to the vehicle frame using a bolt (5/8 x 2 inches), shim (1/4 inch), washer (5/8 inch), and nylon locknut (5/8 inch) as shown in Figure 3.
- 6. Loosely secure the pushbeam to the sideplates using 8 bolts (1/2 inch) and nylon locknuts (1/2 inch) as shown in Figure 3.

Note: Refer to your plow *Owner's Manual* for the appropriate pushbeam height.

- 7. Torque all the fasteners to the following specifications:
 - 5/8-inch bolts to 153 N·m (113 ft-lb)
 - 1/2-inch bolts to 76 N·m (56 ft-lb)

Note: Refer to your vehicle manufacturer for torque specifications of existing hardware.

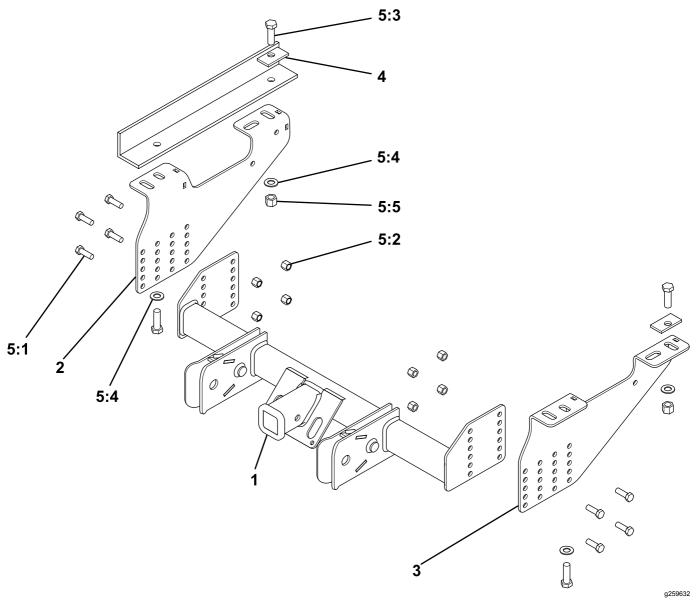


Figure 3
1999 Through 2006 Chevrolet and GMC Parts

ption
5/8-11 X 2, GR5, YZN
ER, 5/8 FLAT
EN, YZN
/8-11, NYL INS, YZN

For 1971 through 1993 Dodge Ram Trucks

Part	Quantity
Sideplate A	1
Sideplate B	1
Bolt (5/8 x 2 inches)	4
Shim (1/4 inch)	4
Shim (3/8 inch) (optional)	4
Washer (5/8 inch)	4
Nylon locknut (5/8 inch)	4
Pushbeam	1
Bolt (1/2 inch)	8
Nylon locknut (1/2 inch)	8

You may need to loosen or remove the spare tire to complete the installation.

- 1. Park the machine on a level surface, shut off the engine, wait for all moving parts to stop, engage the parking brake, and remove the key.
- 2. If your vehicle has a hitch, remove it and retain the hardware.
- 3. Loosely secure the rear of the sideplates to the vehicle frame using a bolt (5/8 x 2 inches), shim (1/4 inch), washer (5/8 inch), and nylon locknut (5/8 inch) as shown in Figure 4.

Note: If your vehicle frame has rivets on the bottom, install a shim (3/8 inch) between the frame and the sideplate as shown in Figure 4.

- 4. Using the sideplate as a guide, drill a hole in the vehicle frame for the sideplate front hardware.
- 5. Loosely secure the front of the sideplates to the vehicle frame using a bolt (5/8 x 2 inches), shim (1/4 inch), washer (5/8 inch), and nylon locknut (5/8 inch) as shown in Figure 4.

Note: If your vehicle frame has rivets on the bottom, install a shim (3/8 inch) between the frame and the sideplate as shown in Figure 4.

6. Loosely secure the pushbeam to the sideplates using 8 bolts (1/2 inch) and nylon locknuts (1/2 inch) as shown in Figure 4.

Note: Refer to your plow *Owner's Manual* for the appropriate pushbeam height.

- 7. Torque all the fasteners to the following specifications:
 - 5/8-inch bolts to 153 N·m (113 ft-lb)
 - 1/2-inch bolts to 76 N·m (56 ft-lb)

Note: Refer to your vehicle manufacturer for torque specifications of existing hardware.

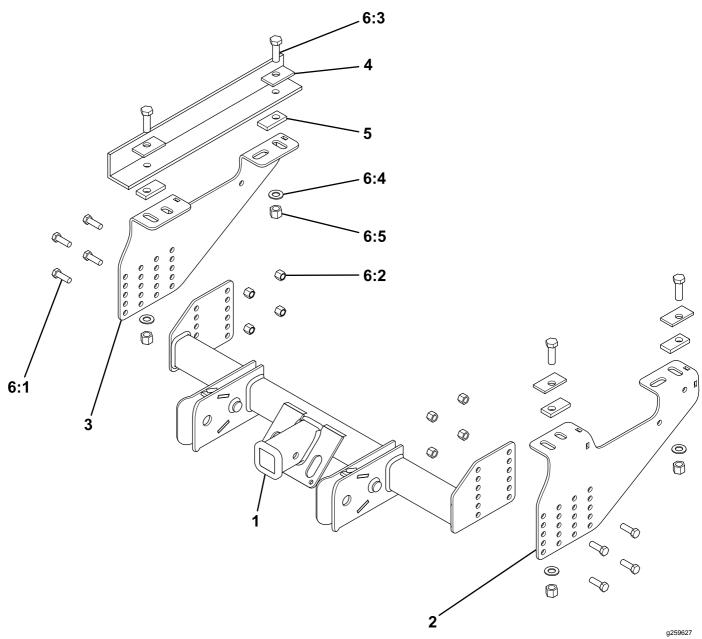


Figure 4
1971 through 1993 Dodge Ram Parts

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	RPL21671	1	WLDMNT, PUSHBEAM, BACKBLADE, TGS MODEL	6:1	HDW01728	8	HHCS, 1/2-13 X 1-1/2, NC, GR5, YZN
2	2 TGS05908	1	SUPPORT PLT ASM A,	6:2	HDW01748	8	NUT, 1/2-13, NYL INS, YZN
			HITCH, TGS	6:3	HDW01731	4	HHCS, 5/8-11 X 2, GR5, YZN
3	TGS05910	1	SUPPORT PLT ASM B, HITCH, TGS	6:4	HDW01726	4	WASHER, 5/8 FLAT HARDEN, YZN
4	TGS05919	4	SHIM, 1/4 PLT, 11/16 HOLE,TGS	6:5	HDW05619	4	NUT, 5/8-11, NYL INS, YZN
5	TGS05918	4	SHIM, 3/8 PLT, 11/16 HOLE,TGS				
6	TGS05911	1	FASTENER KIT, UNIV HITCH, TGS				

For 1994 through 2002 3/4 and 1 Ton Dodge Ram Trucks

Part	Quantity
Sideplate A	1
Sideplate B	1
Bolt (5/8 x 2-1/2 inches)	4
Shim (1/4 inch)	4
Shim (3/8 inch)	8
Washer (5/8 inch)	4
Nylon locknut (5/8 inch)	4
Pushbeam	1
Bolt (1/2 inch)	8
Nylon locknut (1/2 inch)	8

You may need to loosen or remove the spare tire or remove the exhaust hangar from the vehicle frame to complete the installation.

- 1. Park the machine on a level surface, shut off the engine, wait for all moving parts to stop, engage the parking brake, and remove the key.
- 2. If your vehicle has a hitch, remove it and retain the hardware.
- 3. Loosely secure the sideplates to the vehicle frame using 2 bolts (5/8 x 2-1/2 inches), 2 shims (1/4 inch), 4 shims (3/8 inch), 2 washers (5/8 inch), and 2 nylon locknuts (5/8 inch) as shown in Figure 5.

Note: If the front of the sideplate does not line up with a hole in the vehicle frame, you will need to drill a hole using the sideplate as a guide.

4. Loosely secure the pushbeam to the sideplates using 8 bolts (1/2 inch) and nylon locknuts (1/2 inch) as shown in Figure 5.

Note: Refer to your plow *Owner's Manual* for the appropriate pushbeam height.

- 5. Torque all the fasteners to the following specifications:
 - 5/8-inch bolts to 153 N·m (113 ft-lb)
 - 1/2-inch bolts to 76 N·m (56 ft-lb)

Note: Refer to your vehicle manufacturer for torque specifications of existing hardware.

- 6. If you loosened or removed the spare tire, install and tighten it.
- 7. If you removed the exhaust hangar, secure it towards the front of a sideplate.

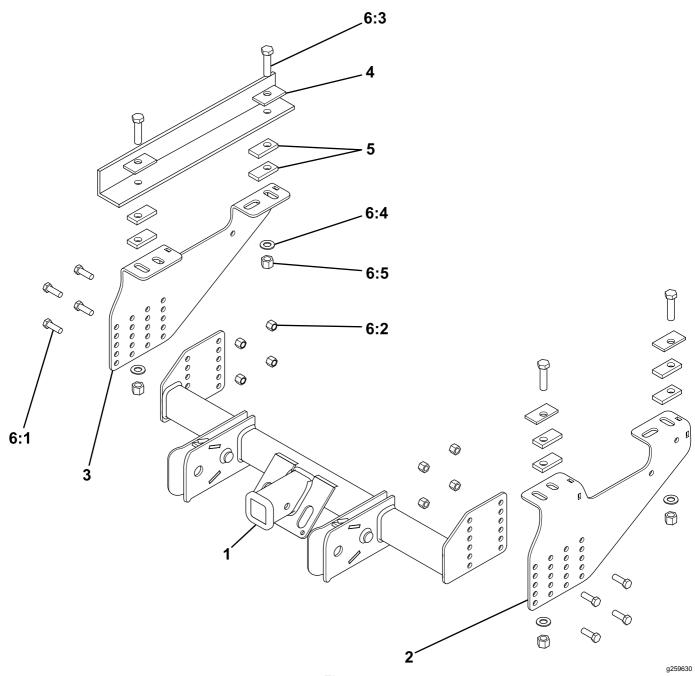


Figure 5
1994 through 2002 3/4 and 1 Ton Dodge Ram Parts

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	RPL21671	1	WLDMNT, PUSHBEAM, BACKBLADE, TGS MODEL	6	TGS05911	1	FASTENER KIT, UNIV HITCH, TGS
2	TGS05908	1	SUPPORT PLT ASM A, HITCH, TGS	6:1	HDW01728	8	HHCS, 1/2-13 X 1-1/2, NC, GR5, YZN
3	3 TGS05910	1 SUPPORT PLT ASM B,	6:2	HDW01748	8	NUT, 1/2-13, NYL INS, YZN	
4	TGS05919	4	HITCH, TGS SHIM, 1/4 PLT, 11/16	6:3	HDW05915	4	HHCS, 5/8-11 X 2-1/2, GR5, YZN
5	TGS05918	TGS05918 8 SHIM, 3/8 PLT, 11/16 HOLE,TGS	SHIM, 3/8 PLT, 11/16	6:4	HDW01726	4	WASHER, 5/8 FLAT HARDEN, YZN
			HOLE,TGS	6:5	HDW05619	4	NUT, 5/8-11, NYL INS, YZN

For 2003 Through 2009 3/4 and 1 Ton Dodge Ram Trucks

Part	Quantity
Sideplate A	1
Sideplate B	1
Shim (3/8 inch)	4
Bolt (5/8 x 2 inches)	4
Washer (5/8 inch)	4
Split lockwasher (5/8 inch)	4
Locknut (5/8 inch)	4
Pushbeam	1
Bolt (1/2 inch)	8
Nylon locknut (1/2 inch)	8

You may need to loosen or remove the spare tire to complete the installation.

- 1. Park the machine on a level surface, shut off the engine, wait for all moving parts to stop, engage the parking brake, and remove the key.
- 2. If your vehicle has a hitch, do not remove it.
- 3. Slide a shim (3/8 inch) on to each of the 4 bolts (5/8 x 2 inches).
- 4. Slide 2 bolt and shim sets into each of the vehicle frame rails and insert them through the large holes that align with the sideplates.
- Loosely secure the sideplates to the vehicle frame using the previously installed bolt and shim, washer (5/8 inch), split lockwasher (5/8 inch), and locknut (5/8 inch) as shown in Figure 3.

Note: You may need to loosen some of the hardware between the vehicle hitch sideplates and bumper support brackets.

6. Loosely secure the pushbeam to the sideplates using 8 bolts (1/2 inch) and nylon locknuts (1/2 inch) as shown in Figure 3.

Note: Refer to your plow *Owner's Manual* for the appropriate pushbeam height.

- 7. Torque all the fasteners to the following specifications:
 - 5/8-inch bolts to 153 N·m (113 ft-lb)
 - 1/2-inch bolts to 76 N·m (56 ft-lb)

Note: Refer to your vehicle manufacturer for torque specifications of existing hardware.

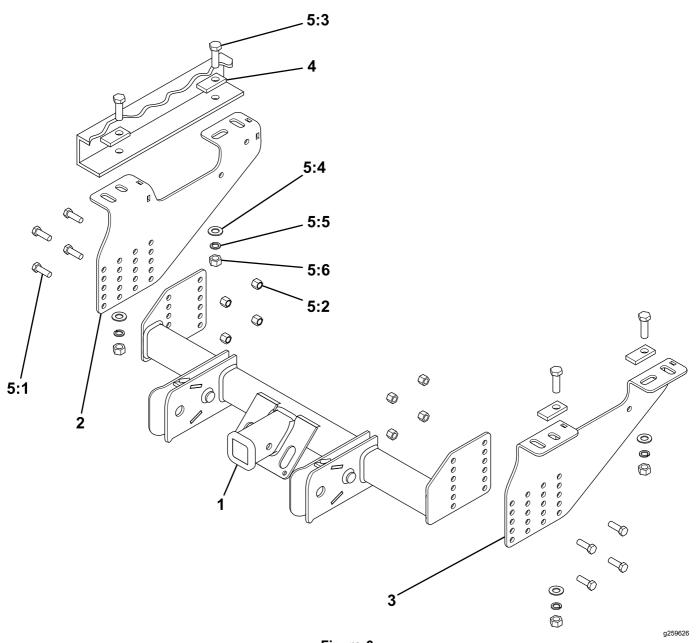


Figure 6
2003 Through 2009 3/4 and 1 Ton Dodge Ram Parts

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	RPL21671	1	WLDMNT, PUSHBEAM, BACKBLADE, TGS MODEL	5:1	HDW01728	8	HHCS, 1/2-13 X 1-1/2, NC, GR5, YZN
2	TGS05908	1	SUPPORT PLT ASM A,	5:2	HDW01748	8	NUT, 1/2-13, NYL INS, YZN
			HITCH, TGS	5:3	HDW01731	4	HHCS, 5/8-11 X 2, GR5, YZN
3	TGS05910	1	SUPPORT PLT ASM B, HITCH, TGS	5:4	HDW01726	4	WASHER, 5/8 FLAT HARDEN. YZN
4	TGS05918	4	SHIM, 3/8 PLT, 11/16 HOLE,TGS	5:5	HDW03891	4	WASHER-LOCK, SPLIT, 5/8, YZN
5	TGS05911	1	FASTENER KIT, UNIV HITCH, TGS	5:6	HDW01777	4	NUT, 5/8-11, FIN, FULL, YZN

For 1973 through 1997 Ford Super Duty Trucks

Part	Quantity
Sideplate A	1
Sideplate B	1
Shim (3/8 inch)	2
Pushbeam	1
Bolt (1/2 inch)	8
Nylon locknut (1/2 inch)	8
Bolt (5/8 x 2 inches)	4
Shim (1/4 inch)	4
Washer (5/8 inch)	4
Nylon locknut (5/8 inch)	4

You may need to loosen or remove the spare tire to complete the installation.

- 1. Park the machine on a level surface, shut off the engine, wait for all moving parts to stop, engage the parking brake, and remove the key.
- 2. If your vehicle has a hitch, remove it and retain the hardware.
- 3. Position a shim (3/8 inch) over the rear hole in the sideplates and clamp the sideplates to the vehicle frame.
- 4. Loosely secure the pushbeam to the sideplates using 8 bolts (1/2 inch) and nylon locknuts (1/2 inch) as shown in Figure 5.

Note: Refer to your plow *Owner's Manual* for the appropriate pushbeam height.

- 5. Using the sideplates as a guide, drill 2 holes (5/8 inch) in each frame rail.
- 6. Loosely secure the sideplates to the vehicle frame using 2 bolts (5/8 x 2 inches), 2 shims (1/4 inch), 2 washers (5/8 inch), and 2 nylon locknuts (5/8 inch) as shown in Figure 5.

Note: Ensure that the rear bolts also go through the shim (3/8 inch).

- 7. Torque all the fasteners to the following specifications:
 - 5/8-inch bolts to 153 N·m (113 ft-lb)
 - 1/2-inch bolts to 76 N·m (56 ft-lb)

Note: Refer to your vehicle manufacturer for torque specifications of existing hardware.

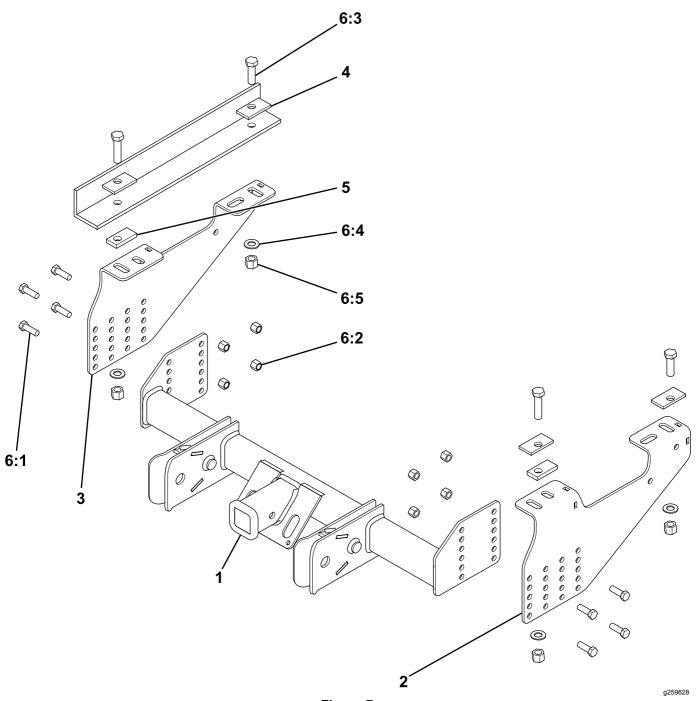


Figure 71973 through 1997 Ford Super Duty Parts

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	RPL21671	1	WLDMNT, PUSHBEAM, BACKBLADE, TGS MODEL	6	TGS05911	1	FASTENER KIT, UNIV HITCH, TGS
2	TGS05908	1	SUPPORT PLT ASM A, HITCH, TGS	6:1	HDW01728	8	HHCS, 1/2-13 X 1-1/2, NC, GR5, YZN
3	TGS05910	1	SUPPORT PLT ASM B,	6:2	HDW01748	8	NUT, 1/2-13, NYL INS, YZN
			HITCH, TGS	6:3	HDW01731	4	HHCS, 5/8-11 X 2, GR5, YZN
4	TGS05919	4	SHIM, 1/4 PLT, 11/16 HOLE,TGS	6:4	HDW01726	4	WASHER, 5/8 FLAT HARDEN, YZN
5	TGS05918	2	SHIM, 3/8 PLT, 11/16 HOLE,TGS	6:5	HDW05619	4	NUT, 5/8-11, NYL INS, YZN

For 1998 Through 2010 Ford Super Duty Trucks

Part	Quantity
Sideplate A	1
Sideplate B	1
Bolt (5/8 x 2 inches)	4
Shim (1/4 inch)	4
Washer (5/8 inch)	4
Nylon locknut (5/8 inch)	4
Pushbeam	1
Bolt (1/2 inch)	8
Nylon locknut (1/2 inch)	8

You may need to loosen or remove the spare tire to complete the installation.

- 1. Park the machine on a level surface, shut off the engine, wait for all moving parts to stop, engage the parking brake, and remove the key.
- 2. If your vehicle has a hitch, remove it and retain the hardware.
- 3. Loosely secure the sideplates to the vehicle frame using 2 bolts (5/8 x 2 inches), 2 shims (1/4 inch), 2 washers (5/8 inch), and 2 nylon locknuts (5/8 inch) as shown in Figure 5.
- 4. Loosely secure the pushbeam to the sideplates using 8 bolts (1/2 inch) and nylon locknuts (1/2 inch) as shown in Figure 5.

Note: Refer to your plow *Owner's Manual* for the appropriate pushbeam height.

- 5. Torque all the fasteners to the following specifications:
 - 5/8-inch bolts to 153 N·m (113 ft-lb)
 - 1/2-inch bolts to 76 N·m (56 ft-lb)

Note: Refer to your vehicle manufacturer for torque specifications of existing hardware.

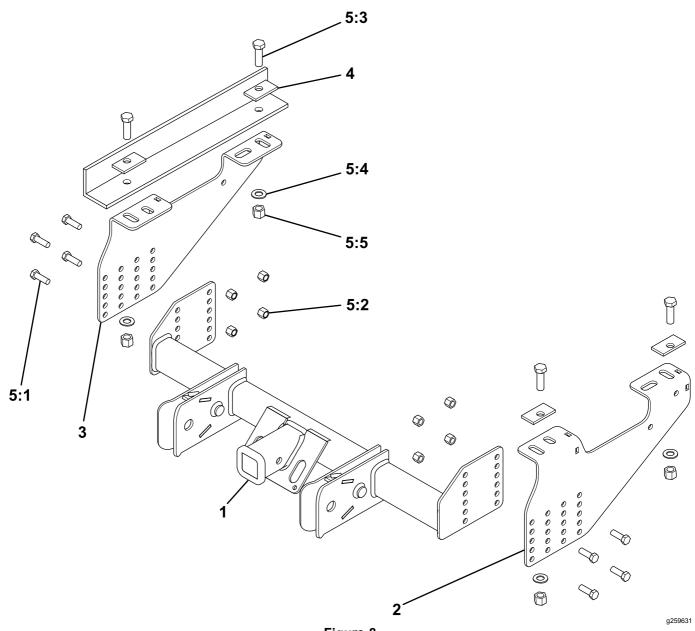


Figure 8
1998 Through 2010 Ford Super Duty Parts

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	RPL21671	1	WLDMNT, PUSHBEAM,	5:3	HDW01731	4	HHCS, 5/8-11 X 2, GR5, YZN
2	TGS05908	1	BACKBLADE, TGS MODEL SUPPORT PLT ASM A,	5:4	HDW01726	4	WASHER, 5/8 FLAT HARDEN, YZN
			HITCH, TGS	5:5	HDW05619	4	NUT, 5/8-11, NYL INS, YZN
3	TGS05910	1	SUPPORT PLT ASM B, HITCH, TGS				, , , ,
4	TGS05919	4	SHIM, 1/4 PLT, 11/16 HOLE,TGS				
5	TGS05911	1	FASTENER KIT, UNIV HITCH, TGS				
5:1	HDW01728	8	HHCS, 1/2-13 X 1-1/2, NC, GR5, YZN				
5:2	HDW01748	8	NUT, 1/2-13, NYL INS, YZN				

