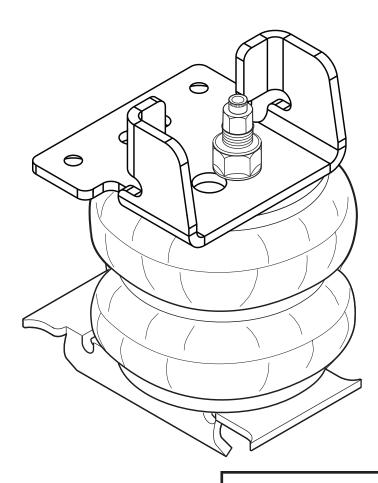


### 81233006 2013-2022 RAM 3500 4WD w/o Factory Air Assist

Congratulations - your new TowPro Helper Springs are quality products capable of improving the handling and comfort of your vehicle. As with all products, proper installation is the key to obtaining all of the benefits your kit is capable of delivering. Please take a few minutes to read through the instructions to identify the components and learn where and how they are used. It is a good idea to start by comparing the parts in your kit with the parts list below.



### **WARNING!**

Do not inflate this assembly when it is unrestricted. The assembly must be restricted by the suspension or other adequate structure. Do not inflate beyond 100 P.S.I. Improper use or over inflation may cause property damage or severe personal injury.

REV1 2/15/2

# **PARTS**

Compare the parts below to your kit. Assure you have all pieces, and organize them for an easier installation.

### **MAIN KIT CONTENTS**

PT # 6401	x 2	AIR SPRING	PT # 5370	x 2	LOWER BRACKET	PT # 3511	x 2	BAIL CLAMP
PT # 5905	x 2	UPPER BRACKET	PT # 5896	x 2	AXLE STRAP BRACKET	PT # 1004	x 1	HEAT SHIELD
						PT # 9415	x 1	AIR LINE TUBE (22 FEET)

### A24-760-7560 INFLATION VALVE BRACKET KIT

PT # 9483	00	NO-DRILL x 1 INFLATION VALVE BRACKET	PT # 9488	× 2 LARGE NYLON TI
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### **A21-760-2560 HARDWARE PACK**

PT # 3069		x 2 3/8" - 16 x 3/4" FLANGE BOLT	PT # 3067			B/8" - 16 FLANGE LOCK NUT	PT # 3293		x 4	M10 - 1.50 x 30mm FLAT HEAD BOLT
PT # 3064	0	3/4" INTERNAL x 2 TOOTH LOCK WASHER	PT # 3295		x 2 3	3/4" - 16 HEX NUT	PT # 3031		x 2	ELBOW AIR FITTING
PT # 3032		INFLATION VALVE x 2 AND VALVE CAP ASSEMBLY	PT # 3033	0	x 4 5	5/16" Flat Washer	PT # 9036		x 6	RED NYLON TIE
							PT # 0899	[((((((((((((((((((((((((((((((((((((((	//////////////////////////////////////	THERMAL SLEEVE

## **CONTENTS AND OVERVIEW**

PAGE 4 REMOVE JOUNCE BUMPER & SELECT LOWER BRACKET ORIENTATION

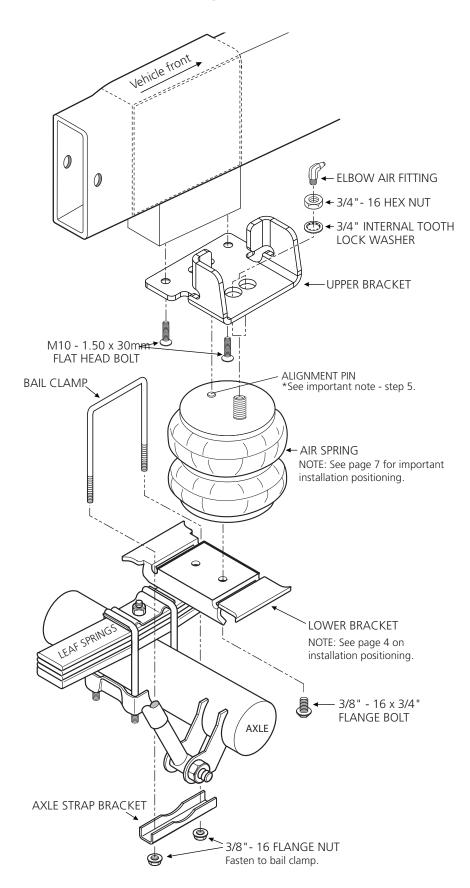
PAGE 5 FASTEN AIR SPRING TO LOWER BRACKET

PAGE 6 INSTALL UPPER BRACKET

PAGE 7 AIR SPRING ASSEMBLY INSTALLATION

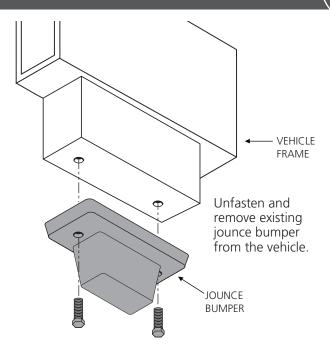
PAGE 8 AXLE STRAP BRACKET INSTALLATION

PAGE 9 HEAT SHIELD & PASSENGER SIDE





START THE INSTALLATION ON THE LEFT SIDE OF THE VEHICLE WHEN FACING FORWARD.



**DETERMINE LOWER BRACKET ORIENTATION** 

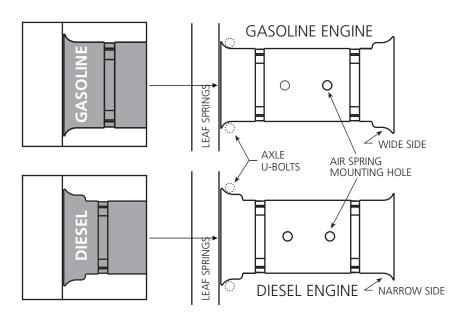
2



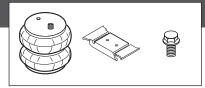


THE ORIENTATION OF THE BRACKET IS IMPORTANT. NOTE THE DIFFERENCE AND USE THE CORRECT SIDE FOR YOUR VEHICLE.

### LOWER BRACKET ORIENTATION

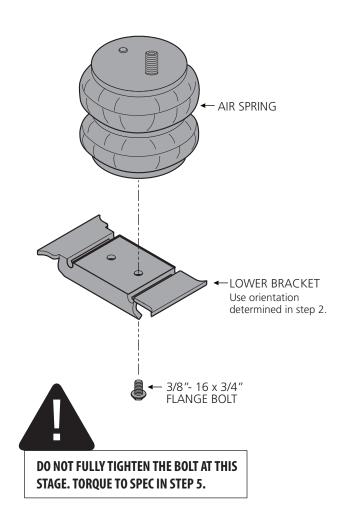


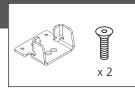


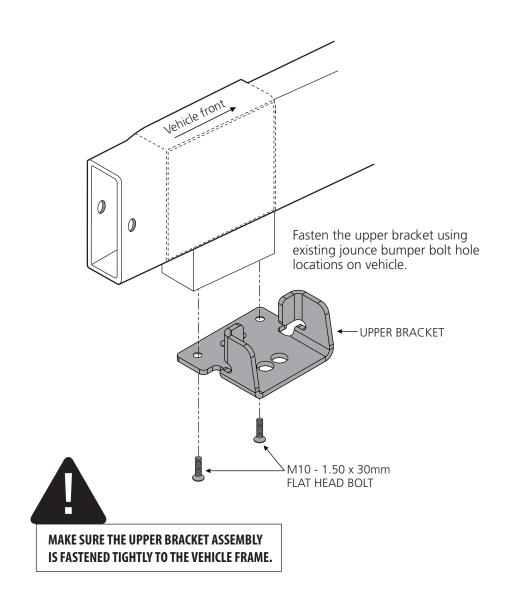


Install the air spring to the lower bracket, as shown.

2 Do not fully tighten the fastener at this stage.









### INSTALL AIR SPRING ASSEMBLY



#### **INSTALLING THE RIGHT SIDE? REMEMBER STEP 7 FIRST!**





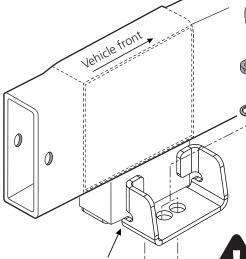


Follow guidelines below to dry fit assembly. Make alignment marks as shown.

Remove assembly and match align - ment marks you made.

Fully tighten flange bolt to fasten the air spring to the lower bracket.

Install assembly and follow the guidelines.



← ELBOW AIR FITTING
Tighten until threadlock

Tighten until threadlock coating is fully engaged.

← 3/4- 16 HEX NUT

Thread onto outside of air combo stud.

**★ 3/4' INTERNAL TOOTH LOCK WASHER** 

**VIEW FROM BELOW** 





ROTATE AIR SPRING ASSEMBLYTO USE FRONT **OR** BACK COMBO STUD AND ALIGNMENT HOLES FOR BEST VERTICAL ALIGNMENT.





**UPPER BRACKET** 

ALIGNMENT PIN ON AIR SPRINGS MUST BE INSTALLED TO FULLY SEAT INTO ONE OF THE ALIGNMENT HOLES IN THE UPPER BRACKET. FAILURE TO DO SO WILL CAUSE IT TO BE PUSHED INTO THE BEAD PLATE, CREATING AN AIR LEAK, AND RESULTING IN AN AIR SPRING FAILURE THAT IS NOT WARRANTABLE. THE ALIGNMENT PIN CANNOT HOLD 2,500 LBS! IT IS USED FOR ALIGNMENT ONLY!

ALIGNMENT PIN
Must fully seat
into alignment
hole selected
above.

MAKE
ALIGNMENT
MARKS

3/8 - 16 x 3/4FLANGE BOLT

Match alignment marks

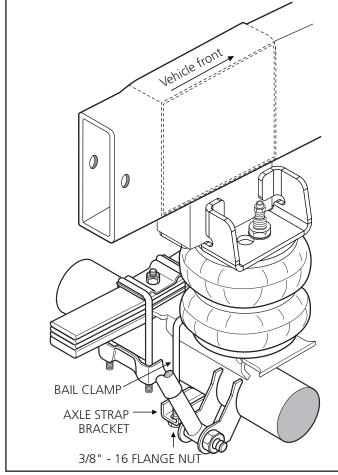


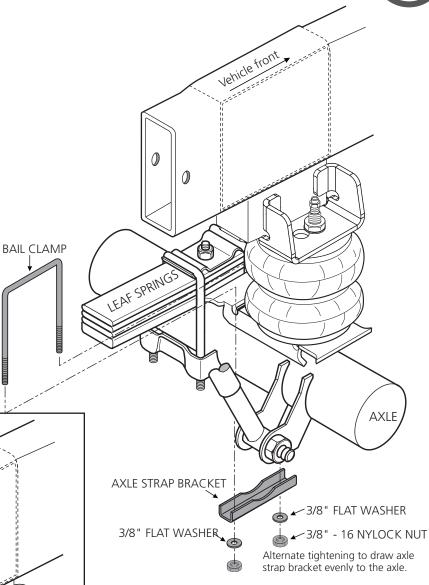
Assure that the lower bracket is tight against the leaf spring stack on the vehicle.

Install the bail clamp over the lower bracket, assuring that the bail clamp is positioned into the lower bracket notches, as shown.

Alternate tightening of the 3/8"-16 flange nuts to draw axle strap bracket evenly around the axle.

### BAIL CLAMP INSTALLED





USE YOUR HAND TO CHECK FOR THE PROPER CLEARANCE AROUND THE AIR SPRING. IF YOUR HAND DOES NOT FIT BETWEEN THE AIR SPRING AND OTHER COMPONENTS, IT WILL RUB!







**AWESOME!** You're done with the left side. The right side installation is the same, with the addition of this step. Go complete steps 1-4 for the right side, then complete this step before continuing to step 5.



### **RIGHT SIDE INSTALLATION MUST INCLUDE HEAT SHIELD!**

