

# EAGLE TUGS



## Parts and Service Manual



**Vehicle Type:** EB2-5 thru EB2-10

**Motor Type:** Diesel / Gas

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# INTRODUCTION

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From everyone at Eagle Tugs, we would like to say Thank You for purchasing an Eagle EB2 series cargo tractor. We take a lot of pride in the quality of the products that we build, as well as our continued customer service. Our goal is to build a long term relationship with our customers. We want you, the customer, to be 100% satisfied with your Eagle experience. To us, this means that your Eagle EB2 series tractor is functionally superior to any other products you have used. This also means that your Eagle product is continually supported in a professional, timely manner.

## PURPOSE & USE OF THIS MANUAL

This manual is designed as a reference guide to make the reader more familiar with the components of the Eagle EB2 series cargo tractor models. This manual includes part numbers and descriptions to assist the reader in ordering component spare/service parts. In this manual you will also find the Eagle Standard Warranty on all of the EB2 series cargo tractors.

## TECHNICAL ASSISTANCE

When addressing a repair procedure or operational problem, please remember that Eagle technical support is only a phone call away. Eagle technicians are available to assist you in vehicle diagnostics and recommended repair procedures. We encourage you to use this service to reduce machine down-time and to gain a better understanding of proper repair procedures.

## FORD WEBSITE

The Ford website <https://fleet.ford.com> features downloadable maintenance schedules, owners manuals, parts searches and much more useful information.

**NOTE: PLEASE CHECK EAGLE WEBSITE PERIODICALLY FOR MANUAL UPDATES AS WELL AS SERVICE BULLETINS.**

## CONTACT INFORMATION

### Eagle Corporate Office

26111 Northline Rd

Taylor, MI 48180

(800) 671-0431

[www.eagletugs.com](http://www.eagletugs.com)

### Customer Service

[customerservice@eagletugs.com](mailto:customerservice@eagletugs.com)

(734) 442-1000 -- (800) 671-0431

### Parts & Service

[parts@eagletugs.com](mailto:parts@eagletugs.com)

(734) 442-1000 -- (800) 671-0431

### Technical Support

[support@eagletugs.com](mailto:support@eagletugs.com)

(734) 442-1000 -- (800) 671-0431

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# TABLE OF CONTENTS

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<b>INTRODUCTION.....</b>	<b>3</b>
PURPOSE & USE OF THIS MANUAL.....	3
TECHNICAL ASSISTANCE.....	3
CONTACT INFORMATION.....	3
<b>WARRANTY.....</b>	<b>6</b>
SAFETY NOTICE.....	6
WARNINGS.....	6
VEHICLE ID INFORMATION.....	7
FORD WARRANTY.....	7
EAGLE WARRANTY.....	8
WARRANTY REGISTRATION.....	9
<b>SHORT/LONG BOX IDENTIFICATION.....</b>	<b>10</b>
<b>SPEED GOVERNOR.....</b>	<b>11</b>
<b>BUMPER AND BODY STEEL.....</b>	<b>12</b>
<b>REAR BED COMPONENTS.....</b>	<b>13</b>
<b>HITCHES.....</b>	<b>14</b>
<b>DRIVESHAFTS.....</b>	<b>15</b>
<b>LEAF SPRINGS.....</b>	<b>15</b>
<b>BRAKE LINES.....</b>	<b>16</b>
<b>EXHAUST.....</b>	<b>16</b>
<b>OPERATOR FLOOR.....</b>	<b>16</b>
<b>MUD FLAPS.....</b>	<b>16</b>
<b>HOURMETER.....</b>	<b>17</b>
<b>ALIGNMENT.....</b>	<b>17</b>
<b>PM SCHEDULE.....</b>	<b>18</b>

# WARRANTY

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## IMPORTANT SAFETY NOTICE

Appropriate service methods and proper repair procedures are essential for the safe, reliable operation of all industrial equipment as well as the personal safety of the individual performing the work. This Service Manual provides general directions for accomplishing service and repair work with tested and effective techniques. Following them will help assure reliability.

There are numerous variations in procedures, techniques, tools and parts for servicing equipment, as well as in the skill of the individual doing the work. This Manual cannot possibly anticipate all such variations and provide advice or cautions as to each. Accordingly, anyone who departs from the instructions provided in this Manual must first establish he compromises his/her personal safety, and/or the equipment integrity by his/her choice of methods, tools or parts.

## WARNINGS

The following list contains some general WARNINGS that you should follow when you work on equipment:

- Always wear safety glasses for eye protection.
- Use safety stands whenever a procedure requires you to be under the equipment.
- Be sure that the ignition switch is always in the OFF position, and battery is disconnected unless otherwise required by the procedure.
- Set the parking brake when working on the equipment. Place wood blocks (4" x 4" or larger) to the front and rear surfaces of the tires to provide further restraint from inadvertent equipment movement.
- Keep yourself and your clothing away from moving parts when the motor is running
- Do not smoke while working on the equipment.
- To avoid injury, always remove rings, watches, loose hanging jewelry, and loose clothing before beginning to work on the equipment. Tie long hair securely behind the head.

For more information regarding safety please refer to the Ford provided operations manual provided with your tractor.

# WARRANTY

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## VEHICLE ID INFORMATION

The VIN is your primary identification tool and can be located at the bottom of the LH side (driver's side) of the front windshield. Many of the components outlined in this manual will be VIN dependant. It is also useful to know the year of manufacture and Ford model number (eg; F-350). Knowing these three key items before contacting Eagle Tugs will enable Eagle support staff to quickly and efficiently assist you .

VIN \_\_\_\_\_

FORD MODEL NO. \_\_\_\_\_

YEAR OF MANUFACTURE \_\_\_\_\_

## FORD WARRANTY

The Eagle EB2 series truck is built on a Ford Motor Company Chassis Cab and is covered by Ford Motor Companies standard warranty. Please refer to the vehicle manual supplied with your EB2 tractor for specific warranty details. For current 2011 models, the Ford general warranty coverage is as follows:

Basic Warranty: 36 months / 36,000 miles

Powertrain Warranty: 60 months / 60,000 miles

Corrosion Perforation Warranty: 60 months / unlimited distance

Roadside Assistance Coverage: 60 months / 60,000 miles

## EAGLE WARRANTY

Items added or modified by Eagle Tugs as shown in this manual are covered under Eagle's one year warranty as stated on the following page.

# WARRANTY

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## Standard Limited Warranty Information\*

The Eagle Tugs (EAGLE) Standard Warranty covers all MTT, RTT-series and Transit Pro tow tractors, as well as all Eagle tow tractor models used in industrial applications. Eagle Tugs warrants that these tractors will be free from defects in material and workmanship for a period of 1 year or 2,000 operating hours, with the exception of the electrical system (see electrical component warranty below), from date of delivery to the first customer (or first use), whichever comes first. Written notice of any claimed defect must be given to Eagle within the warranty period and within thirty (30) days after such defect is discovered. Liability under this warranty is limited to either replacing or repairing, at Eagle's election, any part or parts deemed defective after examination by Eagle or an Authorized Service Representative. Any Eagle tractor or any of its parts returned by the customer to Eagle or an Authorized Service Representative via prepaid transportation, and which is found to be defective, will be repaired or replaced and returned to the customer prepaid. On the other hand, should a part be found not defective, inspection and handling charges may be charged to the customer or Authorized Service Representative by Eagle.

**Electrical Component Warranty:** Electrical components including but not limited to display, starters, alternators and electric fans shall be covered under the respective original manufacturers warranty for each individual component. Copies of the respective warranties are available upon request.

This warranty does not extend to the tires, batteries, and battery chargers as these are warranted directly to the user by their respective manufacturer and not by Eagle or an Authorized Service Representative.

This warranty does not apply to any Eagle tow tractor, or component part(s) that have been subjected to misuse, accident, vandalism, environmental conditions, improper handling or application, maintenance neglect, including lack of lubricants or fluids; nor does it extend to the Eagle tow tractor and/or parts which have been repaired or altered outside of Eagle's plant or the facility of an Authorized Service Representative without the permission of Eagle.

This warranty does not apply to routine maintenance or wearable parts of the Eagle tow tractor such as filters, seals, plugs, hoses, belts, brake pads or shoes, light bulbs, fuses or similar items. Moreover, this warranty does not extend beyond its original term for any Eagle tow tractor or part replaced or repaired under warranty.

This warranty does not cover or provide credit for the following: tractor rental or other substitute equipment; lodging; loss of time, income, sales or profits; loss of the use of tractor; telephone calls or communication expense; lift truck; storage fees; injury or death to persons or damage or destruction of property; or consequential, incidental or punitive damages.

**Labor Allowance:** A labor allowance may be issued upon request at Eagle's discretion. Allowable labor hours and a per hour labor rate will be determined by Eagle according to reasonable automotive standards.

**Warranty Claim Procedure:** When a warranty situation arises, it is essential that the customer contact Eagle's Warranty Department at +1 734-442-1000. The customer will need to provide Eagle with the tow tractor serial number and engine hours. A customer service representative will analyze the problem and determine the next steps. In many cases Eagle's technical support personnel will be able to analyze the problem and recommend adjustments that will solve the problem and reduce down time. If further service is required, an Eagle customer service representative will with customer personnel to arrange a service provider and/or parts be sent to your facility for the repair as quickly as possible.

EXCEPT AS SET FORTH ABOVE, ALL WARRANTIES, CONDITIONS, REPRESENTATIONS, INDEMNITIES AND GUARANTEES, EXPRESS OR IMPLIED, WHETHER ARISING BY STATUTE, CUSTOM OF TRADE OR UNDER ORAL OR WRITTEN STATEMENTS MADE BY OR ON BEHALF OF EAGLE NEGOTIATIONS WITH CUSTOMER, DISTRIBUTOR, DEALER OR ANY REPRESENTATIVE, ARE HEREBY OVERWRITTEN AND EXCLUDED, AND NO LIABILITY SHALL ATTACH TO EAGLE, EITHER IN CONTRACT OR IN TORT, OR STRICT LIABILITY IN TORT, FOR ANY DAMAGE TO PROPERTY, LOSS OF PROFITS, DAMAGES, COSTS, CHARGES, LIABILITY OR EXPENSES, WHETHER DIRECT OR INDIRECT, CONSEQUENTIAL OR OTHERWISE, WHICH ARISE OUT OF OR IN CONNECTION WITH THE SALE OR USE OF ANY EAGLE MACHINE OR THE SUPPLY OF SERVICES.

SUBJECT TO CHANGE WITHOUT NOTICE

Please check our website [www.eagletugs.com](http://www.eagletugs.com) periodically for service bulletins and manual updates.

\*Note - The Eagle Tugs **3-Year Warranty** covers TT-series, eTT-series, XL-series, eXL-series and USATS tow tractors which are used in aviation applications. All MTT and RTT-series, and Transit Pro models, as well as all Eagle tow tractor models which are used in industrial applications, are covered under the Eagle Standard Warranty of 1 Year or 2,000 hours. Eagle Bob Tails are covered under Ford Motor Company's Standard Warranty for each respective Ford truck model.



# WARRANTY

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## WARRANTY REGISTRATION INFORMATION

Please complete the warranty registration information found at our website [www.eagletugs.com](http://www.eagletugs.com).

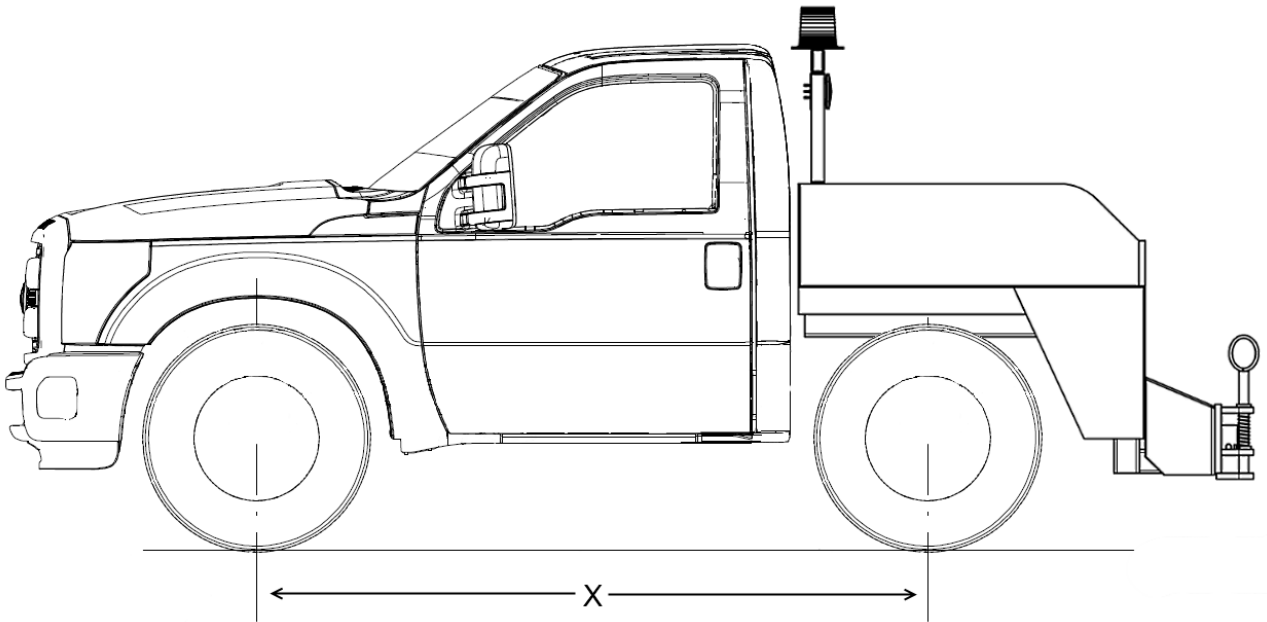
NOTE: At the time a warranty claim is filed it may be necessary for Eagle Tugs to request a copy the maintenance records kept on your tug. For your convenience a printable Preventative Maintenance Schedule page is available in the Maintenance section of this manual.

# SHORT BOX AND LONG BOX IDENTIFICATION

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Eagle Tugs manufactures two versions of EB2 tractors depending on emissions requirements and exhaust packaging. When ordering certain components, it speeds up the process to let the Eagle rep know whether your truck is a long or short box variant.

To determine long/short box, measure the wheelbase as shown below. If your wheelbase is approximately 100", then you have a Short Box tractor. If your wheelbase is approximately 115", then you have a Long Box tractor.



# SPEED GOVERNOR

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## EB2-10

The EB2-10 truck features several programming changes to the engine ECU and transmission control unit:

The engine ECU has been modified to limit top truck speed to 25 mph. This has been done by the engine manufacturer, currently Cummins or Caterpillar. Any service to the engine by a Ford dealer or engine service provider must maintain these limitations for safe operation.

The Allison transmission has been modified to lock out 4th gear by a program change to the TCU. Any service to the transmission by a Ford dealer or Allison service provider must maintain this limitation for vehicle performance.

## EB2-5 AND EB2-8

The EB2-5 and EB2-8 trucks feature a third party engine governor to limit top speed to 25 mph. Contact Eagle Tugs should you experience an issue with this governor. Please provide the VIN, model number, and governor manufacturer (currently Sturdy or Intermotive) to Eagle.

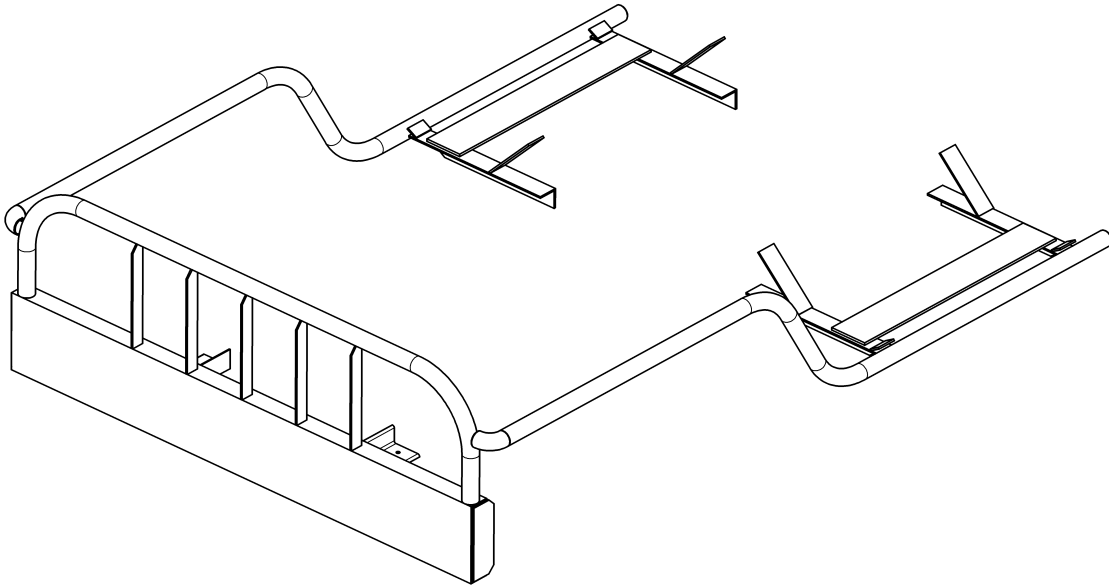


**Warning: Do not alter the vehicle governor(s). Any changes can result in an unsafe vehicle.**

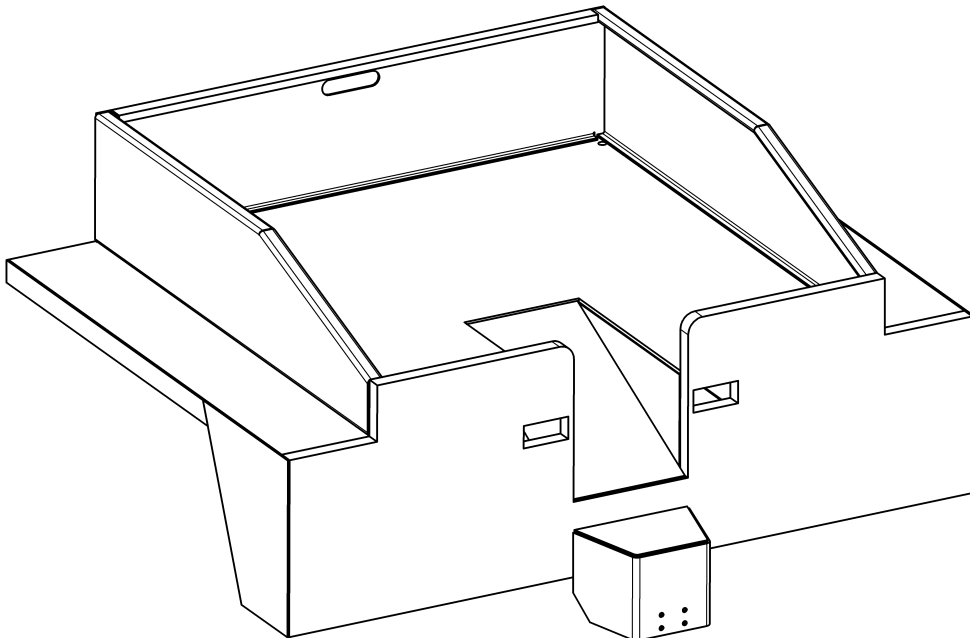
## BUMPER AND BODY STEEL

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Your EB2 tractor has been modified heavily by Eagle Tugs to meet the requirements of a cargo tow tractor. The most visible of these modifications is the addition of a large front steel bumper and wraparound side rails as well as a new rear bed. The intent of the bumper and side rails is to protect the vehicle body from incidental damage. The rear bed provides attachment points for the light rack and hitch, as well as the weight required to meet the drawbar pull. These components are not service components and are expected to last the life of the vehicle.



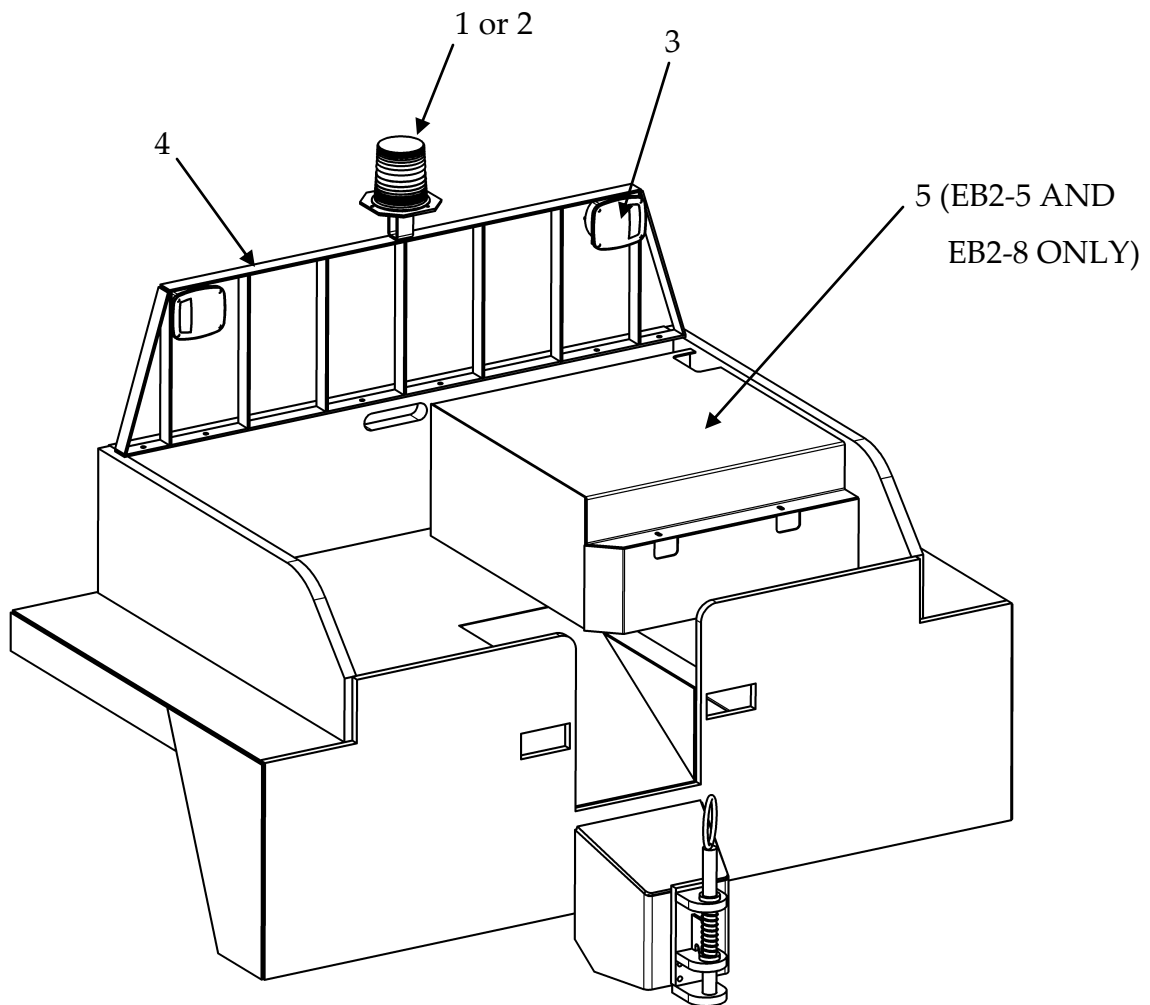
Front bumper and side rail assembly



Rear bed assembly

# REAR BED COMPONENTS

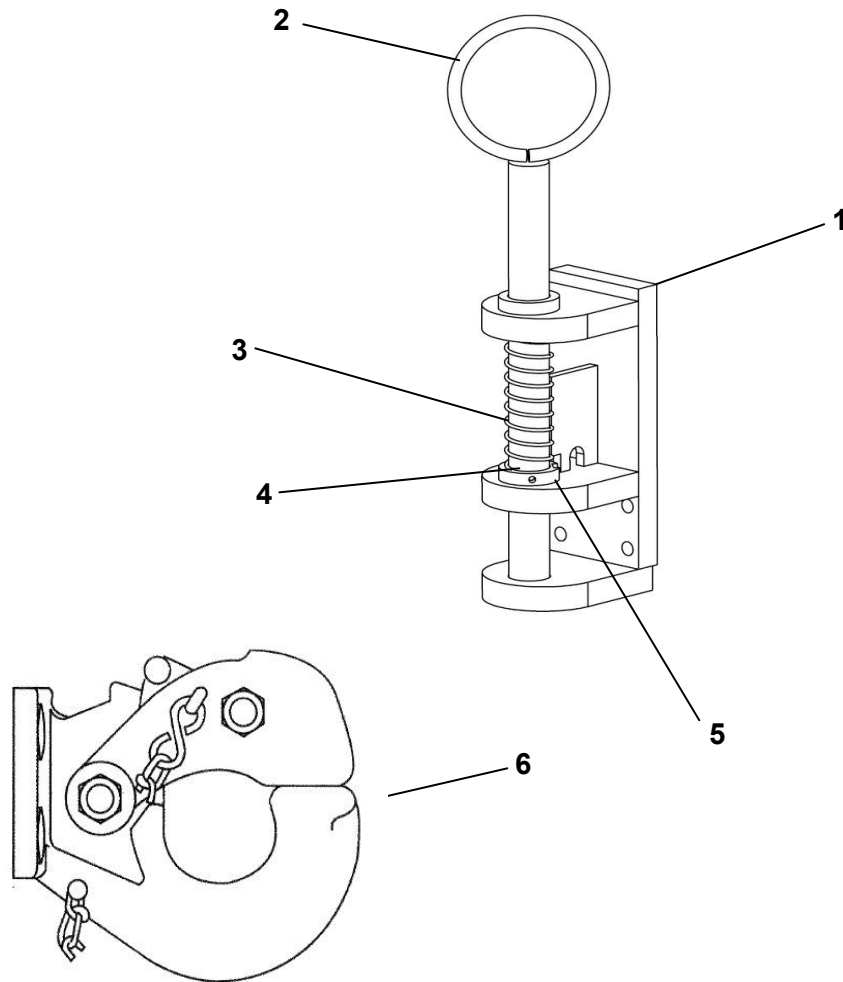
Note that light rack and fuel tank cover are not service components and are expected to last the life of the vehicle.



Item	Part Number	Qty.	Description
1	AE-OPT-0007	1	STROBE LIGHT
1A	129	1	REPLACEMENT STROBE LIGHT
2	AE-OPT-0002	1	ROTATING BEACON
2A	R5012BH	1	REPLACEMENT BULB
3	A-TT4-00292	2	TAIL LIGHT
3A	73-1912	2	REPLACEMENT COVER
3B	1157	2	REPLACEMENT BRAKE LIGHT BULB
3C	1156	2	REPLACEMENT REVERSE LIGHT BULB
4	NPN	1	LIGHT RACK WELDMENT
5	NPN	1	FUEL TANK COVER WELDMENT

# HITCHES

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Item	Part Number	Qty	Description
1	AE-OPT-0033	1	E-HITCH 1 1/2 " PIN-COMplete ASSEMBLY
2	B-TT3-0008 DET2	1	E-HITCH GUIDE 1 1/2" GUIDE PIN WITH RING
3	B-TT3-0008A	1	E-HITCH SPRING
4	B-TT3-0008 DET5	1	LOCKING COLLAR
5	B-TT3-0008B	1	ROLL PIN
6	AE-OPT-0028	1	PINTLE HOOK
7	AE-OPT-0026	1	AIRLINE HITCH 3" PIN WITH CABLE(NOT SHOWN)

\* The above are standard hitch options. Please call for special hitch options information

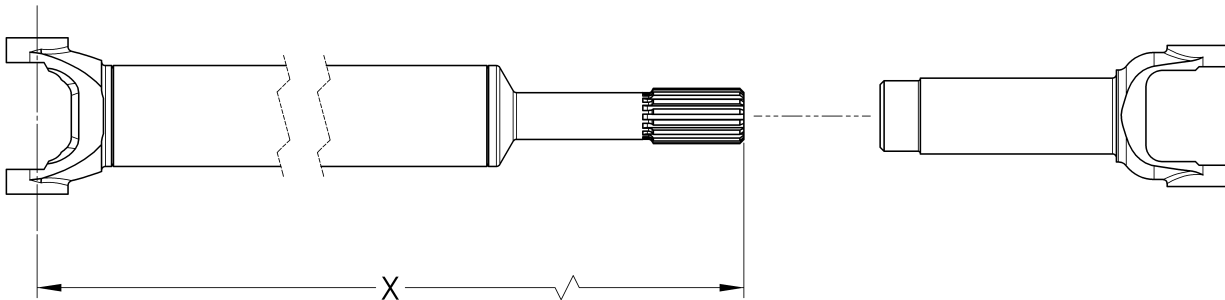
# DRIVESHAFTS

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With the exception of 2011 F550 chassis\*, the driveshaft in your EB2 tractor is a custom shortened factory driveshaft. The stock driveshaft will **NOT** work in your tractor without modification. Your local Ford dealer and/or a driveline repair shop can supply replacement and service parts for the driveshaft.

Driveshaft grease fittings should be greased every 15,000 miles (24,000 km) with standard #2 chassis lube until excess grease is forced from the joint. The center bearing in the 2011 F550 double-cardan joint should be greased every 1,500 miles with 5 pumps of Shell Albida EP 2 grease or equivalent. Do not grease until excess grease is visible, as over-greasing of this joint can result in damage to the rubber boot.

Should you require a complete replacement, please provide Eagle Tugs with the VIN and the below measurement "X" taken from the driveshaft provided with your tractor.



\* The 2011 F550 features custom manufactured components. Please contact Eagle Tugs for service and replacement.

# LEAF SPRINGS

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Long Box Trucks: The springs on your truck have not been modified, only repositioned. Replacements can be obtained from your local Ford dealer.

Short Box Trucks: The springs on your truck have been modified from the original length. Replacements may be obtained from Eagle Tugs. Please have the VIN and model number available when contacting Eagle.

## **BRAKE LINES AND CABLES**

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Brake lines and parking brake cables that extend behind the back of the cab have been modified by Eagle Tugs. Replacements may be obtained from Eagle Tugs. Please have the VIN and model number available when contacting Eagle.

## **EXHAUST**

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EB2-10 tractors starting MY2011 feature a stock exhaust system and service can be obtained from a local Ford dealer.

All other tractors feature a custom manufactured exhaust system utilizing components from the Ford exhaust system. If under Eagle warranty, call Eagle to arrange for service. If not under warranty, service should be obtained from a local exhaust service facility.

## **OPERATOR FLOOR PLATE**

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Your tractor has been equipped with a diamond plate operator floor. This is not a service components and is expected to last the life of the vehicle. Should you require a replacement plate, Eagle Tugs can supply one. Due to model changes on trucks, it will be the responsibility of the customer to secure the replacement floor plate.

## **MUD FLAPS**

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Your tractor has been equipped with standard mud flaps. Replacements can be purchased from any truck supply shop.



## HOURLMETER

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Your tractor may be equipped with an optional hourmeter. Depending on the model year, this may be part of the Ford chassis cab standard equipment.

For non-Ford hourmeters, a replacement can be obtained from Eagle, P/N A-TT4-00418.

## ALIGNMENT

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Due to the unique application of your Bobtail tractor, Eagle Tugs has established a front alignment spec that is different from the factory Ford spec. Through 40 years of experience, we have found that the following alignment specs reduce tire wear and increase steering performance.

**Toe Out: 1/16"**

**Camber: 0°**

# PM SCHEDULE

The following preventative Maintenance schedule is intended to be used as a reference. Always refer to the operators manual included with your truck for full preventative maintenance details. One hour of operation is equivalent to 25 miles per the included maintenance charts.

Miles (x 1,000)	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75
Kilometers (x 1,000)	12	24	36	48	60	72	84	96	108	120
Months	6	12	18	24	30	36	42	48	54	60
Change engine oil and filter	•	•	•	•	•	•	•	•	•	•
Rotate tires, inspect tire wear and measure tread depth. Vehicles equipped with dual rear wheels should only rotate if unusual wear is observed.	•	•	•	•	•	•	•	•	•	•
Inspect the wheels and related components for abnormal noise, wear, looseness or drag	•	•	•	•	•	•	•	•	•	•
Perform multi-point inspection (recommended)	•	•	•	•	•	•	•	•	•	•
Inspect automatic transmission fluid level (if equipped with a dipstick). Consult dealer for requirements.		•		•		•		•		•
Inspect brake pads, shoes, rotors, drums, brake linings, hoses and parking brake		•		•		•		•		•
Inspect engine cooling system concentration and hoses		•		•		•		•		•
Inspect exhaust system and heat shields		•		•		•		•		•
Inspect front axle and U-joints; lubricate if equipped with grease fittings (4WD vehicles)		•		•		•		•		•
Inspect half-shaft boots (if equipped)		•		•		•		•		•
Inspect and lubricate steering linkage, ball joints, suspension, tie-rod ends, driveshaft and U-joints		•		•		•		•		•
Torque the rear U-bolts (Transit Connect)		•		•		•		•		•
Inspect cabin air filter (if equipped)	•		•		•		•		•	
Miles (x 1,000)	82.5	90	97.5	105	112.5	120	127.5	135	142.5	150
Kilometers (x 1,000)	132	144	156	168	180	192	204	216	228	240
Months	66	72	78	84	90	96	102	108	114	120
Change engine oil and filter	•	•	•	•	•	•	•	•	•	•
Rotate tires, inspect tire wear and measure tread depth. Vehicles equipped with dual rear wheels should only rotate if unusual wear is observed.	•	•	•	•	•	•	•	•	•	•
Inspect the wheels and related components for abnormal noise, wear, looseness or drag	•	•	•	•	•	•	•	•	•	•
Perform multi-point inspection (recommended)	•	•	•	•	•	•	•	•	•	•
Inspect automatic transmission fluid level (if equipped with a dipstick). Consult dealer for requirements.		•		•		•		•		•
Inspect brake pads, shoes, rotors, drums, brake linings, hoses and parking brake		•		•		•		•		•
Inspect engine cooling system concentration and hoses		•		•		•		•		•
Inspect exhaust system and heat shields		•		•		•		•		•
Inspect front axle and U-joints; lubricate if equipped with grease fittings (4WD vehicles)		•		•		•		•		•
Inspect half-shaft boots (if equipped)		•		•		•		•		•
Inspect and lubricate steering linkage, ball joints, suspension, tie-rod ends, driveshaft and U-joints		•		•		•		•		•
Torque the rear U-bolts (Transit Connect)		•		•		•		•		•
Inspect cabin air filter (if equipped)	•		•		•		•		•	

# PM SCHEDULE

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Every 15,000 miles (24,000 km)	Replace cabin air filter (if equipped)
Every 30,000 miles (48,000 km)	Replace climate-controlled seat filter (if equipped)
	Replace engine air filter
	Replace fuel filter (Ranger)
Every 60,000 miles (96,000 km)	Change automatic transmission fluid and filter on TorqShift® transmission. Consult dealer for requirements.
	Replace front wheel bearing grease and grease seal on 4x2 vehicles (if non-sealed bearings are used)
Every 105,000 miles (168,000 km)	Change engine coolant <sup>1</sup>
	Change manual transmission fluid (all trucks except Escape)
	Change rear axle fluid (Dana axles)
	Replace spark plugs
	Inspect accessory drive belt(s) <sup>2</sup>
Every 150,000 miles (240,000 km)	Change automatic transmission fluid and filter (filter not required on 6F35, 6F50 and AWF-21 transmissions) except TorqShift® transmission. Consult dealer for requirements.
	Change front axle fluid (4WD vehicles)
	Change manual transmission fluid
	Change rear axle fluid on all rear-wheel drive (RWD) vehicles
	Change transfer case fluid (4WD vehicles)
	Replace accessory drive belt(s) if not replaced within the last 100,000 miles (160,000 km)
	Replace front wheel bearings and seals on 4x2 vehicles (if non-sealed bearings are used)
<sup>1</sup> Initial replacement at 105,000 miles (160,000 km) or 72 months; every 45,000 miles (80,000 km) or 36 months thereafter	
<sup>2</sup> Perform a follow-up inspection at 120,000 miles (192,000 km)	

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