



655 Eisenhower Drive
Owatonna, MN USA
Phone: (507) 455-7000
Tech. Serv.: (800) 533-6127
Fax: (800) 955-8329
Order Entry: (800) 533-6127
Fax: (800) 283-8665
International Sales: (507) 455-7223
Fax: (507) 455-7063

Form No. 563992

Parts List &
Operating Instructions
for:

5130

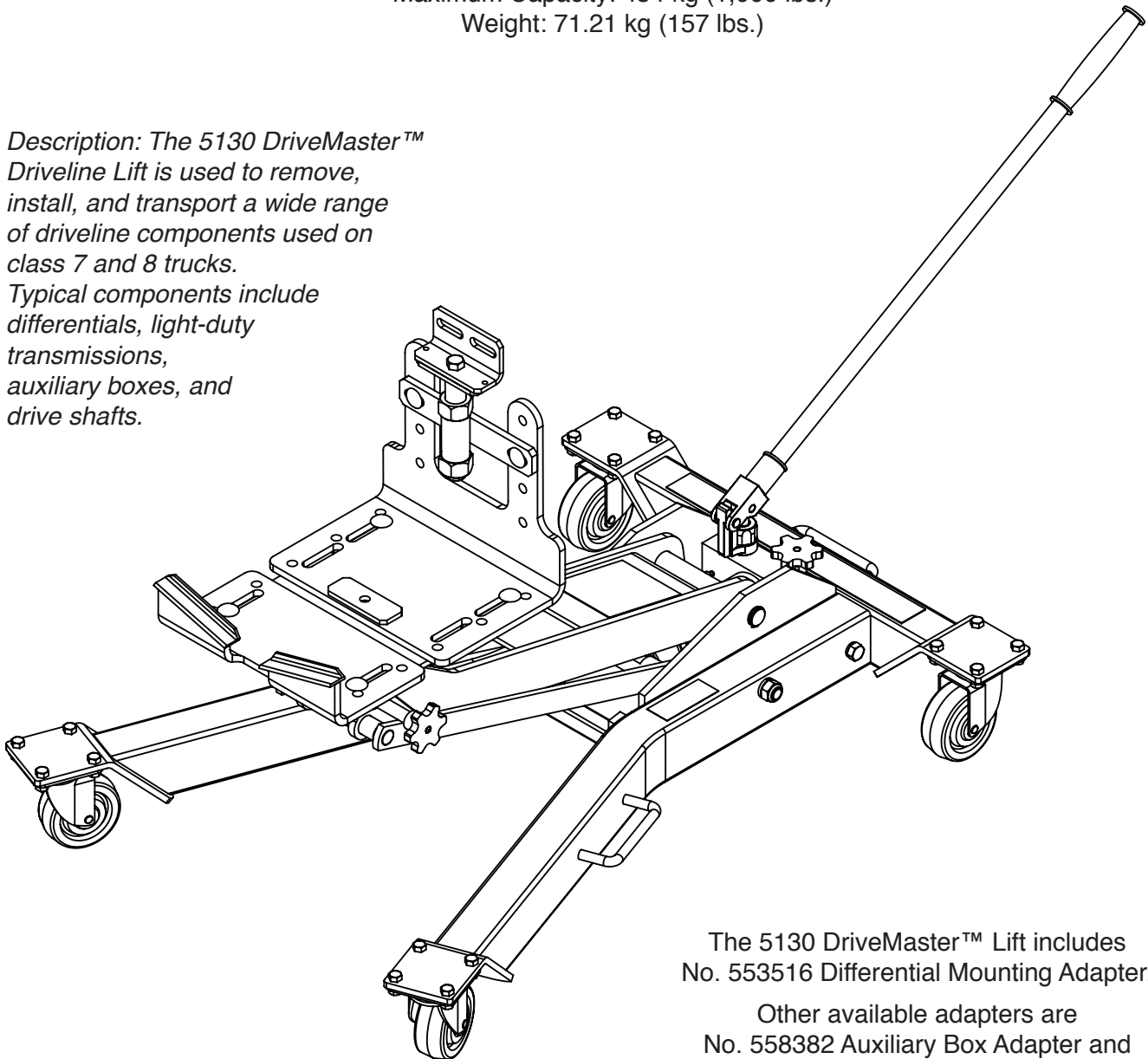


Original Instructions

DriveMaster™ Driveline Lift

Maximum Capacity: 454 kg (1,000 lbs.)
Weight: 71.21 kg (157 lbs.)

Description: The 5130 DriveMaster™ Driveline Lift is used to remove, install, and transport a wide range of driveline components used on class 7 and 8 trucks. Typical components include differentials, light-duty transmissions, auxiliary boxes, and drive shafts.



The 5130 DriveMaster™ Lift includes
No. 553516 Differential Mounting Adapter.

Other available adapters are
No. 558382 Auxiliary Box Adapter and
No. 561949 Light-duty Transmission Adapters
(see back sheet 6 of 6).

Sheet No. 1 of 6

Issue Date: Rev. C October 27, 2014

Explanation of Safety Signal Words

The safety signal word designates the degree or level of hazard seriousness.



DANGER: Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION: Used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

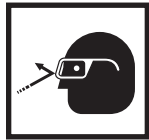
Safety Precautions



WARNING: To prevent personal injury and/or property damage,



- Study, understand, and follow all instructions before operating this lift. If the operator cannot read or understand these operating instructions and safety precautions, they must be read and discussed in the operator's native language.

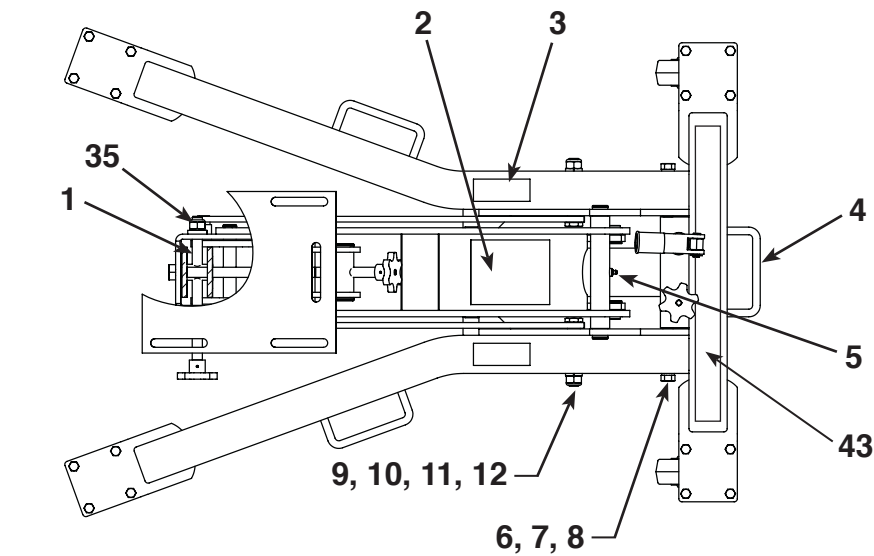


- Only qualified operators may install, operate, adjust, maintain, clean, repair, inspect, or transport this lift.
- Wear eye protection that meets the requirements of ANSI Z87.1, OSHA, CE EN166, AND AS/NZS 1337.
- Use the lift on hard, smooth, level surfaces only.
- Inspect the lift before each use; do not use the lift if it is damaged, altered, or in poor condition.

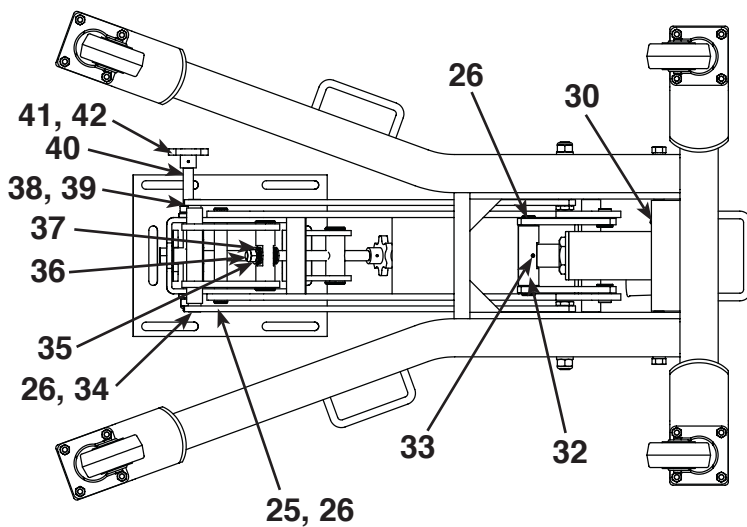
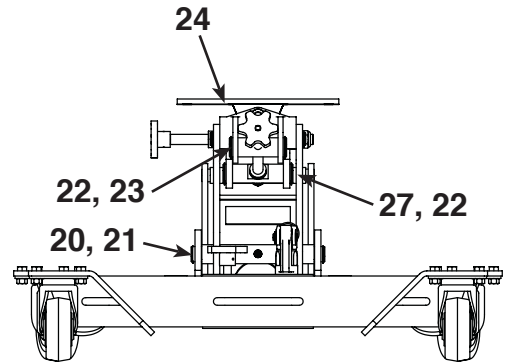
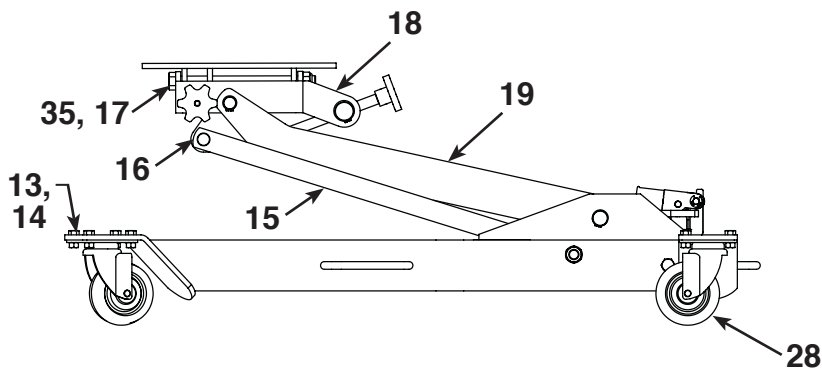


- No alterations shall be made to this lift unless approved by OTC. If a modification is needed, contact OTC Technical Services.
- This product is designed for and limited to removal, installation, and transportation in the lowered position, of driveline components on medium and heavy-duty trucks only.
- Do not exceed the rated capacity of 454 kg (1,000 lbs.).
- Lift only dead weight.
- Adequately support the truck before starting repairs to keep it stable. Block or chock all wheels and engage the emergency brake.
- Before using the lift, read, understand, and follow all warnings and driveline disassembly procedures in the truck's service manual.
- Stay out from underneath the load at all times.
- Secure the load to the lift before raising, lowering, or moving the load.
- Center the load on the lift's mounting plate. Off-center loads can damage seals and cause lift failure.
- Keep body parts clear of the lift when lowering a load to the floor.
- Lower the lift slowly and carefully while watching the position of the load.
- SLOWLY AND CAREFULLY move the lift around corners.
- This hydraulic driveline lift has an overload valve that is set at the factory. Do not adjust this setting.
- Use only approved hydraulic fluid (ISO 46 or equivalent). The use of alcohol or hydraulic brake fluid could damage seals and result in lift failure.
- Use only those repair parts called out in the parts list in this document. Items found in the parts list have been carefully tested and selected by OTC.

Parts List



Note: See back of sheet 3 of 6 for No. 553516 Differential Mounting Adapter parts list.



This document contains product parts lists and information regarding operation and maintenance. Items listed in the parts list have been carefully tested and selected by OTC. Therefore: Use only OTC replacement parts.

Get parts at
OTCparts.com



Product questions may be directed to
OTC Technical Services at (800) 533-6127.

Parts List

Item No.	Part No.	No. Req'd	Description
1	562655	1	Trunnion
2	556946	1	Logo Decal
3	218297	2	Warning Decal
6	556650	2	Tube
9	556649	2	Tube
15	556921	2	Strap
16	556657	1	Lower Pivot

Item No.	Part No.	No. Req'd	Description
18	556658	1	Upper Pivot
19	556648	1	Lift Arm Weldment
24	556659	1	Table Top Weldment
30	554853	1	Pump Assembly – see sheet 3 of 6
32	556655	1	Trunnion
43	568612	1	Warning Decal

Repair Kits

No. 565182 Hardware Kit

Item No.	No. Req'd	Description
5	1	Grease Fitting
7	2	Lock Washer
8	2	Hex Hd. Cap Screw
10	2	Lock Washer
11	2	Nut – M16 x 1.5 -6H Nylock
12	2	Hex Hd. Cap Screw
20	2	External Retaining Ring
21	1	Pin
22	4	External Retaining Ring
26	6	Retaining Ring – 19 mm
33	1	Cotter Pin – Extended Prong Type

No. 565183 Pivot Assembly Hardware Kit

Item No.	No. Req'd	Description
17	1	Hex Hd. Cap Screw
25	1	Pin
26	4	Retaining Ring – 19 mm
34	1	Pin
35	1	Metric Locking Nut

No. 565184 Forcing Screw Kit

Item No.	No. Req'd	Description
22	4	External Retaining Ring
23	1	Trunnion
27	1	Trunnion
35	2	Metric Locking Nut
36	1	Forcing Screw
37	2	Bearing
38	1	Locking Collar
39	1	Pin
40	1	Forcing Screw
41	2	Roll Pin
42	2	Knob

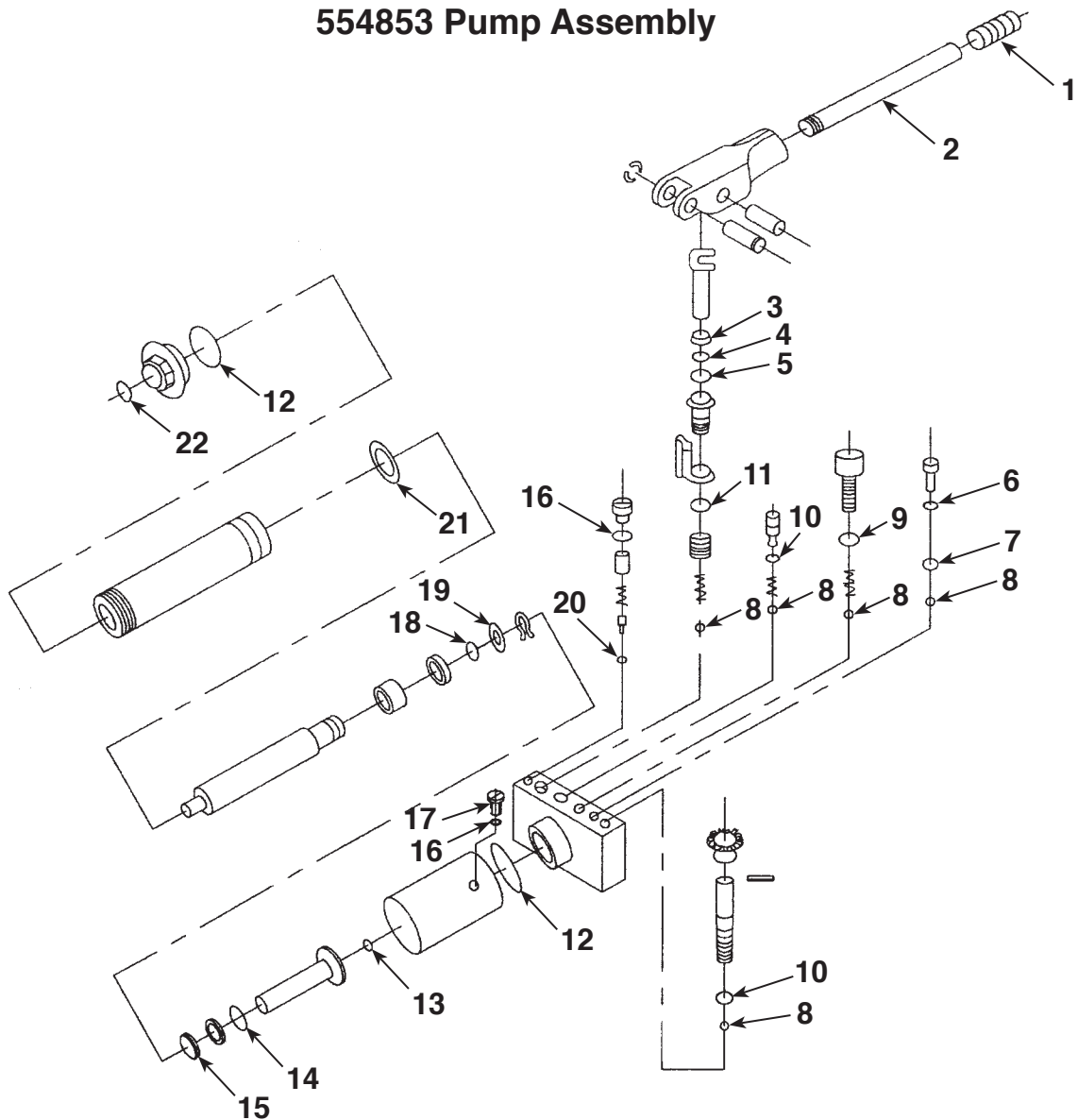
No. 565185 Adjusting Knob Kit

Item No.	No. Req'd	Description
41	2	Roll Pin
42	2	Knob

No. 565186 Caster Kit

Item No.	No. Req'd	Description
13	8	Lock Nut
14	8	Hex Hd. Cap Screw – .375-16
28	2	Swivel Caster

554853 Pump Assembly



No. 565181 Seal Kit

Item No.	No. Req'd	Description	Item No.	No. Req'd	Description
3	1	Wiper	13	1	O-ring
4	1	Backup Ring	14	1	O-ring
5	1	O-ring	15	1	Y-ring
6	1	Seal Ring	16	2	O-ring
7	1	Ball	17	1	Oil Fill Plug
8	5	Ball	18	1	O-ring
9	1	Seal Ring	19	1	Washer
10	2	O-ring	20	1	Ball
11	1	Seal Ring	21	1	O-ring
12	2	Seal Ring	22	1	O-ring

No. 565187 Handle Kit

Item No.	No. Req'd	Description
1	1	Handle Grip
2	1	Handle

Setup

General

Assemble the handle by threading the pump handle into the pump handle socket.

Bleeding Air from the Hydraulic System

Air can accumulate within a hydraulic system during shipment or after prolonged use. This entrapped air causes the lift to respond slowly or feel "spongy." To remove the air:

1. Open the release valve by turning the knob counterclockwise (CCW).
2. Pump the lift handle until resistance is felt.
3. Close the release valve by turning the knob clockwise (CW).
4. If the lift does not immediately respond to pumping the handle, repeat Steps 1—3.

Operating Instructions



WARNING: To prevent personal injury and/or equipment damage, read, understand, and follow all warnings and instructions before operating this lift. Refer to the truck service manual for additional safety warnings and procedures.

Removal Operation

1. Before each use, remove trapped air from the hydraulic system. Refer to the Setup section "Bleeding Air from the Hydraulic System."
2. Plan for the specific driveline component that is to be removed. Attach the correct adapter securely to the lift platform. The lift must be sitting on a hard, smooth, and level surface.
3. Close the control valve by turning the knob clockwise (CW).
4. With the lift lowered completely, position it under the driveline component to be removed.
5. Operate the pump handle to raise the lift arm and align the component with the adapter.
6. Turn the tilt knobs to move the adapter forward or backward and side-to-side for closer alignment with the component. *Note: The location of these tilt knobs when the lift is in position can make it difficult to turn them by hand. Attach a .25-inch square-drive wrench to the hole in the center of the knob to assist with turning. Do not use an impact wrench or power tool.*
7. Secure the component to the adapter according to the adapter's instructions.
8. Disassemble the component from the truck according to the instructions in the truck's service manual.
9. Carefully lower the load by **slowly** opening the control valve (turning the knob counterclockwise [CCW]). The control valve regulates how fast the boom is lowered.
10. With the load lowered to its lowest position on the lift, slowly and carefully move the load out from under the truck using the handles on the lift frame.

Installation Operation

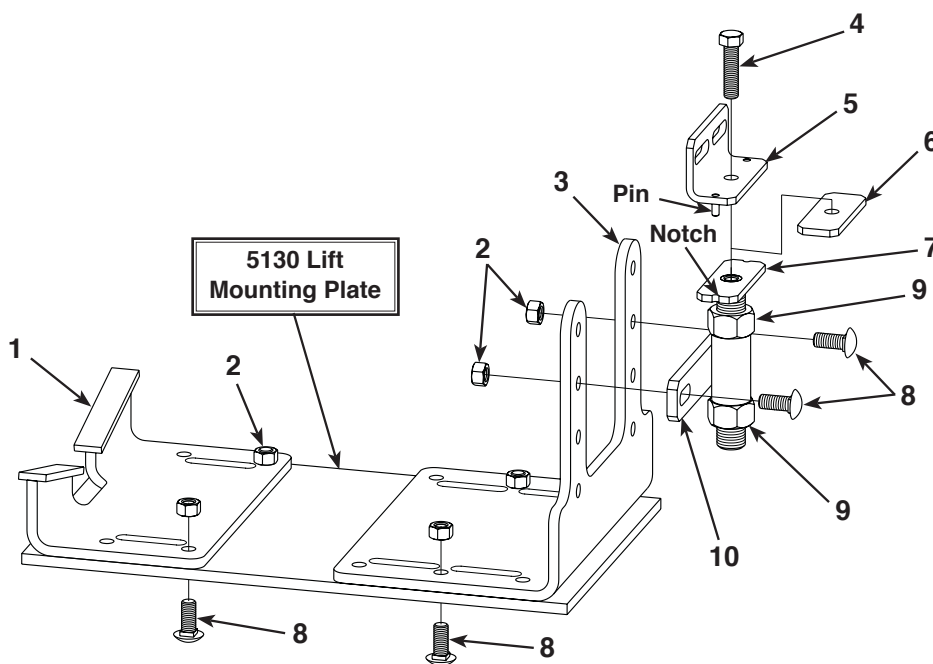
1. Before each use, remove trapped air from the hydraulic system. Refer to the Setup section "Bleeding Air from the Hydraulic System."
2. Plan for the specific driveline component to be installed. Securely attach the correct adapter to the lift platform. The lift must be sitting on a hard, smooth, and level surface.
3. With the lift in its lowest position, close the control valve by turning the knob clockwise (CW).
4. Move the driveline component over and onto the adapter. Secure the component to the adapter according to the adapter's instructions.
5. Using the handles on the lift frame, slowly and carefully move the load under the truck and in position where the component will be installed.

Operating Instructions (continued)

6. Operate the pump handle to raise the component to the truck.
7. Turn the tilt knobs to move the adapter forward or backward and side-to-side to align the component for installation. *Note: The weight of the load can make it difficult to turn the tilt knobs by hand. Attach a .25-inch square-drive wrench to the hole in the center of these knobs to assist with turning. Do not use an impact wrench or power tool.*
8. Securely assemble the component to the truck according to the instructions in the truck's service manual.
9. Disassemble the component from the lift adapter and ensure the component is secure in the truck before continuing.
10. Slowly turn the release knob counterclockwise (CCW) to lower the lift arm to its lowest position.
11. Using the handles on the lift frame, move the lift out from under the truck.

No. 553516 Differential Mounting Adapter

Maximum Capacity: 454 kg (1,000 lbs.)



Parts List

Item No.	Part No.	Qty.	Description
1	553358	1	Plate Weldment
3	553355	1	Plate
5	553360	1	Bent Clamp Assembly
6	553356	1	Top Clamp
7	553361	1	Support Screw Weldment
10	553359	1	Support Weldment

Repair Kit No. 568560 contains:

Item No.	Qty.	Description
2	6	Hex Nut (1/2-13)
4	1	Hex Head Cap Screw
8	6	Carriage Bolt (round head; square neck)
9	2	Hex Nut

Sheet No. 4 of 6

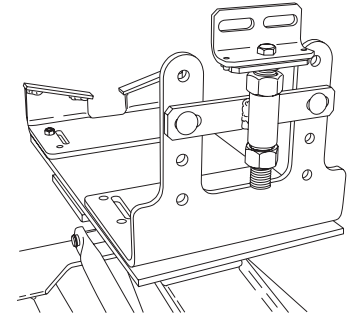
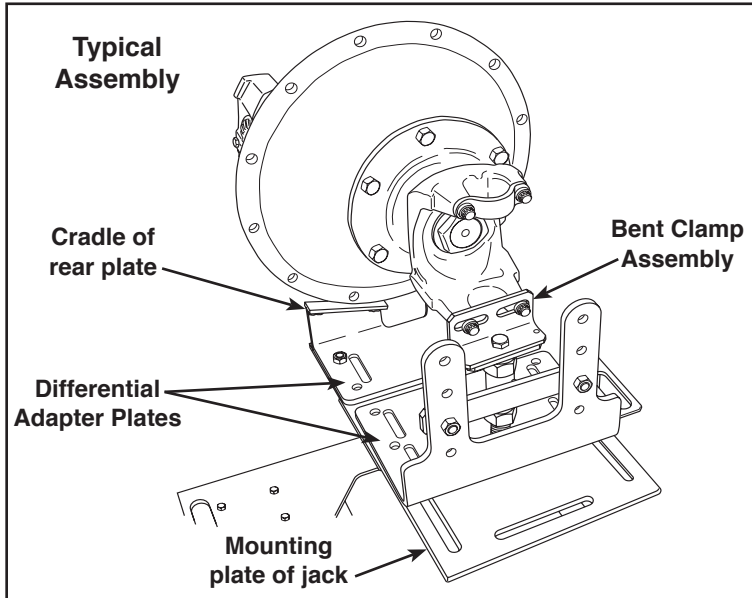
Issue Date: Rev. C October 27, 2014

No. 553516 Differential Mounting Adapter Assembly

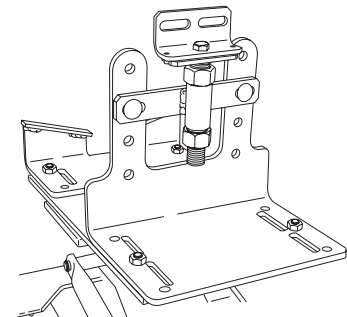
(Item numbers refer to parts list on sheet 4 of 6.)

1. Determine if the differential has removable end caps and follow the appropriate procedure.

If the Differential Has Removable End Caps:

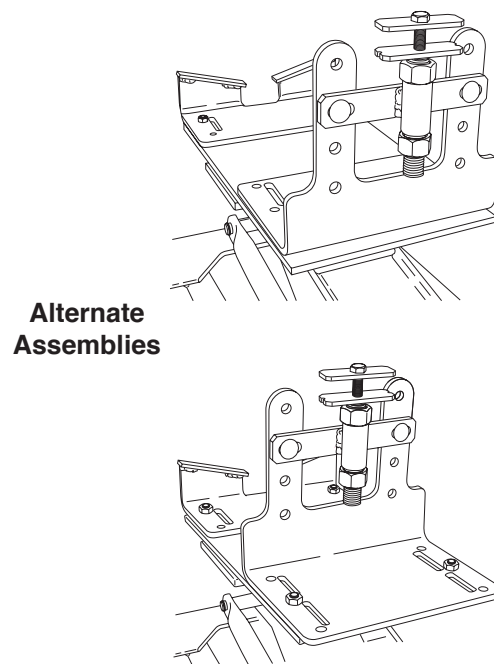
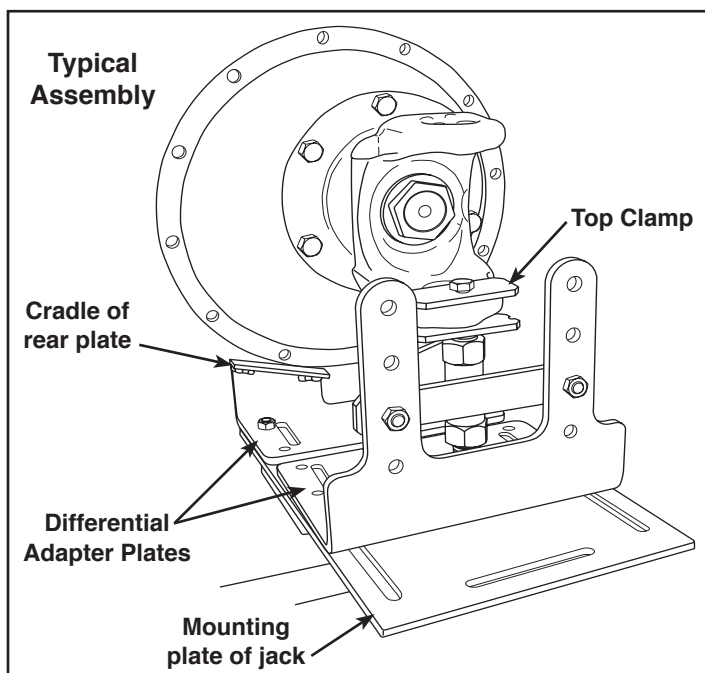


Alternate Assemblies



1. Remove the lowest end cap from the yoke of the differential.
2. Position the lift under the differential.
3. Loosely assemble the adapter plates (Item Nos. 1 and 3) to the mounting plate of the jack using hex nuts and carriage bolts (Nos. 2 and 8, four each). Orient and space the adapter plates to fit the shape of the differential as closely as possible.
4. Assemble the support screw weldment (No. 7) and bent clamp assembly (No. 5) to the support weldment (No. 10) as follows:
 - a. Thread a hex nut (No. 9) onto the support screw (No. 7), and insert the screw into the housing on the support weldment (No. 10). Thread the other hex nut (No. 9) onto the bottom of the screw.
 - b. Attach the bent clamp assembly (No. 5) to the support screw weldment (No. 7) using a hex head cap screw (No. 4). *Note: The pins on the bent clamp fit into notches on the support screw weldment.*
5. Using hex nuts and carriage bolts (Nos. 2 and 8, two each), attach the support weldment assembly to the pair of holes in the plate (No. 3) that best align the bent clamp assembly to the yoke of the differential.
6. Adjust the hex nuts on the support screw up or down as needed to further align the bent clamp assembly to the yoke.
7. Verify the alignment of the adapters with the differential, and secure all bolts and screws.
8. Close the control valve on the jack or lift. Operate the pump handle to raise the boom and align the adapter plates with the differential. The flange of the differential must rest on the cradle of the rear plate as shown in the "Typical Assembly" graphic.
9. Adjust the front plate / support screw assembly, if necessary, until the bent clamp assembly aligns with the yoke of the differential. Attach the clamp to the yoke using the bolts from the yoke end cap.
10. Remove the differential from the vehicle according to the instructions in the vehicle service manual.

If the Differential Does Not Have Removable End Caps:



- 1 Position the jack under the differential.
2. Loosely assemble the adapter plates (Item Nos. 1 and 3) to the mounting plate of the jack using hex nuts and carriage bolts (Nos. 2 and 8, four each). Orient and space the adapter plates to fit the shape of the differential as closely as possible.
3. Thread a hex nut (No. 9) onto the support screw (No. 7), and insert the screw into the housing on the support weldment (No. 10). Thread the other hex nut (No. 9) onto the bottom of the screw.
4. Using hex nuts and carriage bolts (Nos. 2 and 8, two each), attach the support weldment assembly to the pair of holes in the plate (No. 3) that best suits alignment with the yoke of the differential.
5. Adjust the hex nuts on the support screw up or down as needed to further align with the yoke.
6. With the hole in the yoke of the differential aligned over the support screw, attach the top clamps (No. 6) to the support screw weldment (No. 7) using a hex head cap screw (No. 4).
7. Verify the alignment of the adapters with the differential, and secure all bolts and screws. Lock the hex nuts on the support screw.
8. Close the control valve on the jack or lift. Operate the pump handle to raise the boom and align the adapter plates with the differential. The flange of the differential must rest on the cradle of the rear plate as shown in the "Typical Assembly" graphic.
9. Adjust the front plate / support screw assembly, if necessary, until the yoke of the differential is supported by the support screw and the top clamp holds the yoke firmly in place.
10. Remove the differential from the vehicle according to the instructions in the vehicle service manual.

Preventive Maintenance



WARNING: To prevent personal injury and/or property damage,

- Only qualified personnel shall perform inspections and repairs to this lift.
- Before each use, an approved inspector must inspect the lift for bends, cracks, dents, elongated holes, or missing hardware. If damage is found, discontinue use.
- Use only those repair parts called out in the parts list in this document. Items found in the parts list have been carefully tested and selected by OTC.

Note: Dirt is the single greatest cause of failure in hydraulic units. Keep the lift clean and well lubricated to prevent foreign matter from entering the system. If the lift has been exposed to rain, snow, sand, or grit, it must be cleaned before it is used.

Storage

Lower the lift arm completely and store the lift in a well-protected area where it will not be exposed to corrosive vapors, abrasive dust, or any other harmful element.

Lubrication

Lubricate the moving parts at least once a month. Add grease to the grease fitting every three months.

Oil Replacement and Level

Replace the oil in the pump reservoir at least once a year. To check the oil level, place the lift on level ground and lower the lift arm completely. Remove the oil fill plug. The oil level should be within 10 mm (.375 in.) of the filler plug hole. If necessary, add approved anti-wear hydraulic oil and reinstall the fill plug. **CAUTION: Use only approved hydraulic fluid such as ISO 46 or an equivalent with a 215 SUS viscosity rating at 37.78° C (100° F). The use of alcohol, hydraulic brake fluid, detergent motor oil, or transmission fluid could damage seals and result in lift failure.**

Inspection

Inspect the lift before each use. Take corrective action if any of the following problems are found:

- | | |
|---|--|
| a. Cracked or damaged housing | e. Malfunctioning swivel heads or adjusting screws |
| b. Excessive wear, bending, or other damage | f. Loose hardware |
| c. Leaking hydraulic fluid | g. Modified or altered equipment |
| d. Scored or damaged piston rod | |

Repair

If repair is needed, use only the repair parts listed in this document. These items have been carefully tested and selected by OTC. Parts may be obtained at OTCparts.com.

Disposal

At the end of this lift's useful life, drain the oil and deliver it to an authorized agent for disposal. Dispose of the lift in accordance with local, state or federal regulations.

Troubleshooting Guide

Repair procedures must be performed in a dirt-free environment by qualified personnel who are familiar with this equipment.

Trouble	Cause	Solution
Unit does not lift	<ol style="list-style-type: none"> 1. Release valve is open 2. Low/no oil in reservoir 3. Air-locked system 4. Load is above capacity of unit 5. Delivery valve and/or bypass valve not working correctly 6. Packing worn out or defective 	<ol style="list-style-type: none"> 1. <i>Close release valve.</i> 2. <i>Fill with oil and bleed system.</i> 3. <i>Bleed system.</i> 4. <i>Use correct equipment.</i> 5. <i>Clean to remove dirt or foreign matter. Replace oil.</i> 6. <i>Replace power unit.</i>
Unit lifts only partially	<ol style="list-style-type: none"> 1. Too much or not enough oil 	<ol style="list-style-type: none"> 1. <i>Check oil level.</i>
Unit advances slowly	<ol style="list-style-type: none"> 1. Pump not working correctly 2. Leaking seals 	<ol style="list-style-type: none"> 1. <i>Replace seals with #565181 seal kit.</i> 2. <i>Replace power unit.</i>
Unit lifts load, but doesn't hold	<ol style="list-style-type: none"> 1. Cylinder packing is leaking 2. Valve not working correctly (suction, delivery, release, or bypass) 3. Air-locked system 	<ol style="list-style-type: none"> 1. <i>Replace seals with #565181 seal kit.</i> 2. <i>Inspect valves. Clean and repair seat surfaces.</i> 3. <i>Bleed system.</i>
Unit leaks oil	<ol style="list-style-type: none"> 1. Worn or damaged seals 	<ol style="list-style-type: none"> 1. <i>Replace seals with #565181 seal kit.</i>
Unit will not retract	<ol style="list-style-type: none"> 1. Release valve is closed 	<ol style="list-style-type: none"> 1. <i>Open or clean release valve.</i>
Unit retracts slowly	<ol style="list-style-type: none"> 1. Cylinder damaged internally 2. Link section is binding 	<ol style="list-style-type: none"> 1. <i>Replace power unit.</i> 2. <i>Lubricate link section.</i>

Additional Mounting Adapters (not included with the 5130)

558382 Auxiliary Box Adapter

Maximum Capacity: 227 kg (500 lbs.)

Description: Mounting adapter designed to be used on a transmission jack mounting plate for the purpose of removing and installing the transmission housing auxiliary box.

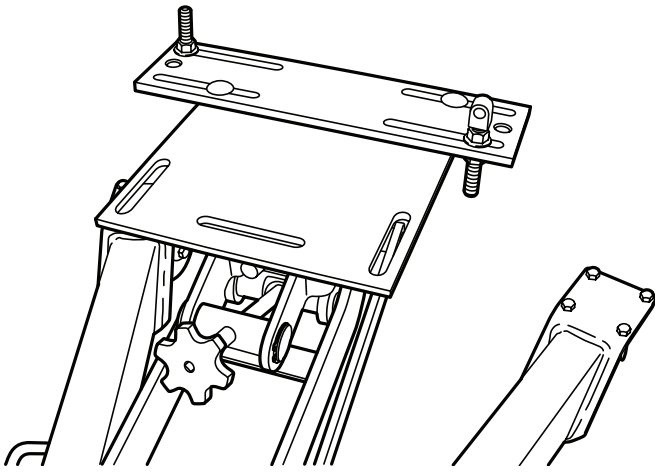


Figure 1

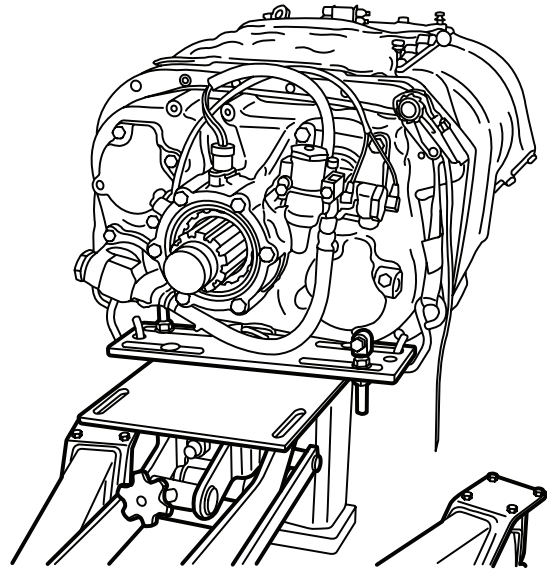


Figure 2

561949 Light-Duty Transmission Adapters

Maximum Capacity: 454 kg (1,000 lbs.)

Description: Four universal mounting adapters designed to be used on a transmission jack mounting plate for the purpose of transporting and repairing vehicle transmissions.

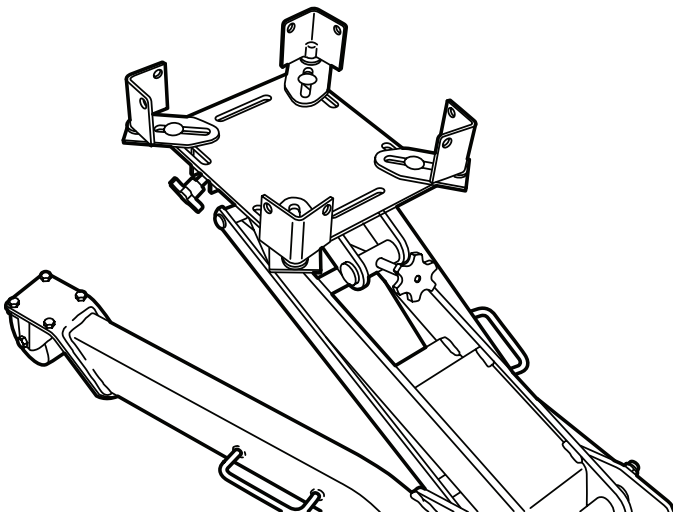


Figure 1

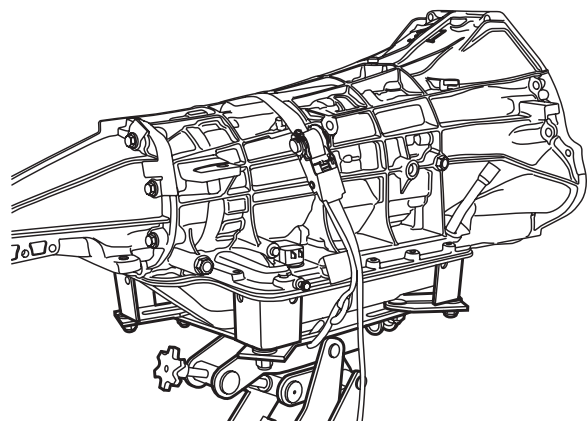


Figure 2

English

We Bosch Automotive Service Solutions LLC
of 655 Eisenhower Drive
Owatonna, Minnesota 55060 USA

in accordance with the following Directive(s):
2006/42/EC The Machinery Directive

hereby declare that:

Equipment DriveMaster™ Driveline Lift
Model Number 5130

is in conformity with the applicable requirements of the following documents:

Ref. No.	Title	Edition / Date
N/A	N/A	N/A

EC Declaration of Conformity

I hereby declare that the equipment named here has been designed to comply with the relevant sections of the above referenced specifications and is in accordance with the requirements of the Directive(s).

Signed by:

Name: Mike Schoenoff
Position: Director of Engineering, Special Service Tools
Location: Owatonna, Minnesota
Date: July 3, 2013

The technical documentation for the machinery is available from
Name: Bosch Automotive Service Solutions GmbH
Address: Am Dörrenhof 1
85131 Pollenfeld / Preith, Germany
represented by Gary Palmer, Geschäftsführer

Español

Nosotros, Bosch Automotive Service Solutions LLC
de 655 Eisenhower Drive
Owatonna, Minnesota 55060 EE.UU.

de acuerdo con la(s) siguiente(s) Directiva(s):
2006/42/EC La Directiva de Maquinaria

por la presente declara que:

Equipo del Elevador de Línea de Transmisión DriveMaster™
Número de modelo 5130

está en conformidad con los requerimientos aplicables de los siguientes documentos:

Núm. ref	Título	Edición/Fecha
N/A	N/A	N/A

Declaración de conformidad con EC

Declaro por la presente que el equipamiento nombrado aquí ha sido diseñado para cumplir con las secciones relevantes de las especificaciones anteriormente indicadas y está de acuerdo con los requisitos de la(s) Directiva(s).

Firmado por:

Nombre: Mike Schoenoff
Cargo: Director de Ingeniería, herramientas del servicio especial
Ubicación: Owatonna, Minnesota
Fecha: July 3, 2013

La documentación técnica de la maquinaria se encuentra disponible en
Nombre: Bosch Automotive Service Solutions GmbH
Dirección: Am Dörrenhof 1
85131 Pollenfeld / Preith, Alemania
representado por Gary Palmer, Geschäftsführer

Français

Nous, Bosch Automotive Service Solutions LLC
résidant à 655 Eisenhower Drive
Owatonna, Minnesota 55060, États-Unis

en vertu de la ou des directives suivantes :
2006/42/EC Directive relative aux machines

déclarons par la présente que :

l'équipement Système de levage de
transmission DriveMaster™
Numéro de modèle 5130

est conforme aux exigences applicables des documents suivants :

Réf. n°	Titre	Édition/Date
S/O	S/O	S/O

Déclaration de conformité européenne

Je déclare par la présente que l'équipement, désigné ici présent, a été conçu conformément aux articles appropriés des spécifications susmentionnées et respecte les exigences de la ou des Directives.

Signé par :

Nom : Mike Schoenoff
Fonction : Directeur de l'ingénierie, outils de service spécial
Lieu : Owatonna, Minnesota
Date : July 3, 2013

La documentation technique de la machinerie est disponible auprès de
Nom : Bosch Automotive Service Solutions GmbH
Adresse : Am Dörrenhof 1
85131 Pollenfeld/Preith, Allemagne
représenté par Gary Palmer, Geschäftsführer

Deutsch

Wir, Bosch Automotive Service Solutions LLC
Firmensitz 655 Eisenhower Drive
Owatonna, Minnesota 55060 USA

erklären in Übereinstimmung mit der/den folgende/n Richtlinie(n):
2006/42/EG Maschinenrichtlinie,

dass:

Maschine DriveMaster™ Hebebock für
Antriebskomponenten
Modellnummer 5130

die Anforderungen der folgenden Dokumente erfüllt.

Ref.-Nr.	Titel	Auflage/Datum
n.z.	n.z.	n.z.

EG-Konformitätserklärung

Ich erkläre hiermit, dass das oben genannte Gerät so entwickelt wurde, dass es den relevanten Abschnitten der oben angegebenen Spezifikationen entspricht und die Anforderungen der Richtlinie(n) erfüllt.

Unterschrift:

Name: Mike Schoenoff
Stellung: Direktor de Technik, spezieller Service-Hilfsmittel
Standort: Owatonna, Minnesota 55060 USA
Datum: July 3, 2013

Die technischen Unterlagen für dieses Gerät sind erhältlich bei
Name: Bosch Automotive Service Solutions GmbH
Anschriфт: Am Dörrenhof 1
85131 Pollenfeld/Preith, Deutschland
vertreten durch Gary Palmer, Geschäftsführer