CONTENTS

Cab Door

Figure 10-20-3

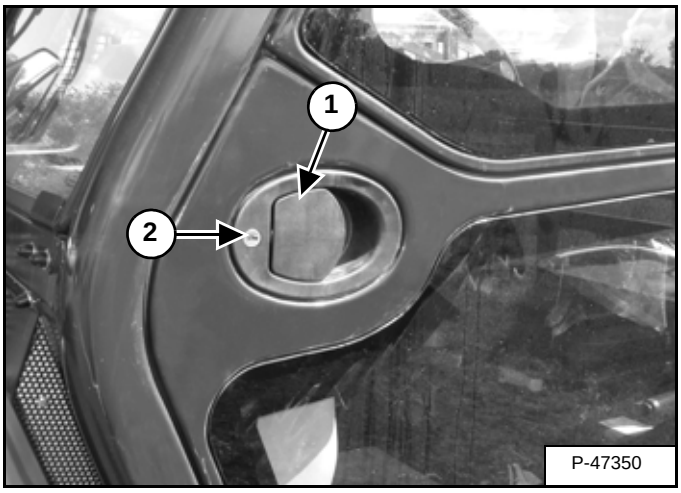
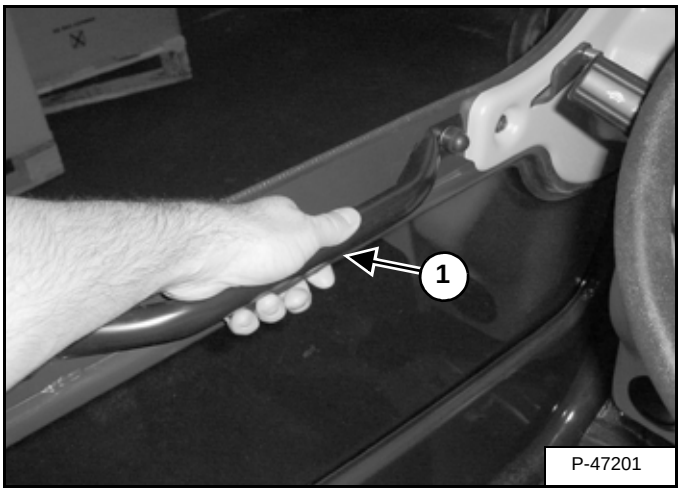


Figure 10-20-4

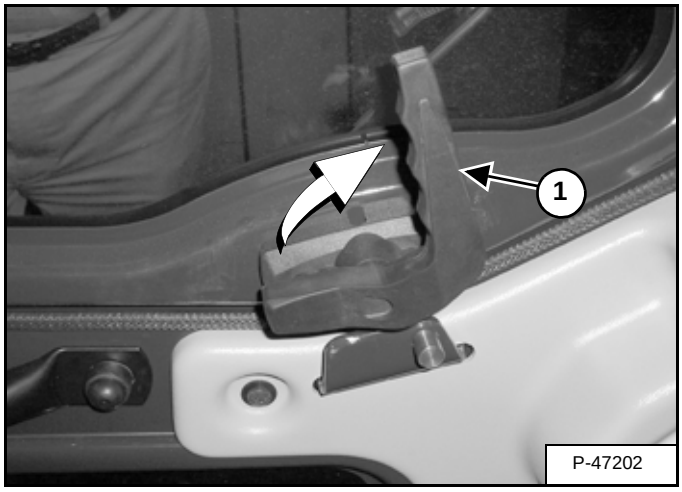


The cab door can be opened from the outside of the cab using the latch (Item 1) **[Figure 10-20-3]** and open from the inside of the cab when you squeeze the latch (Item 1) **[Figure 10-20-4]** (as shown).

The cab door can be locked (Item 2) **[Figure 10-20-3]** with the start key.

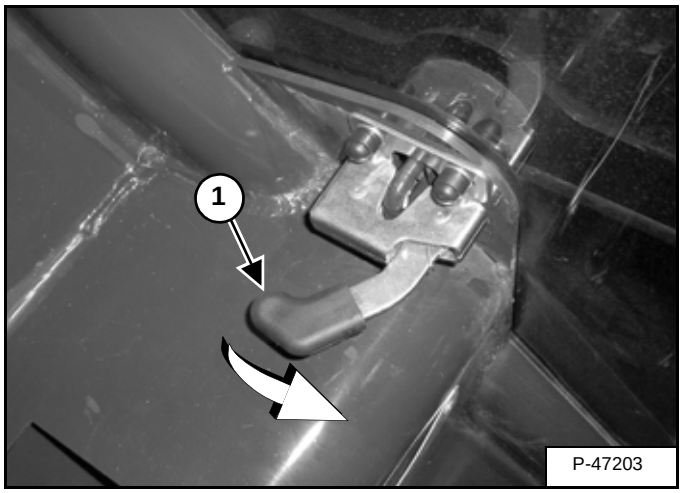
Cab Door Window

Figure 10-20-5



Turn the handle (Item 1) **[Figure 10-20-5]** (as shown). Push open the window fully until it latches against the cab.

Figure 10-20-6

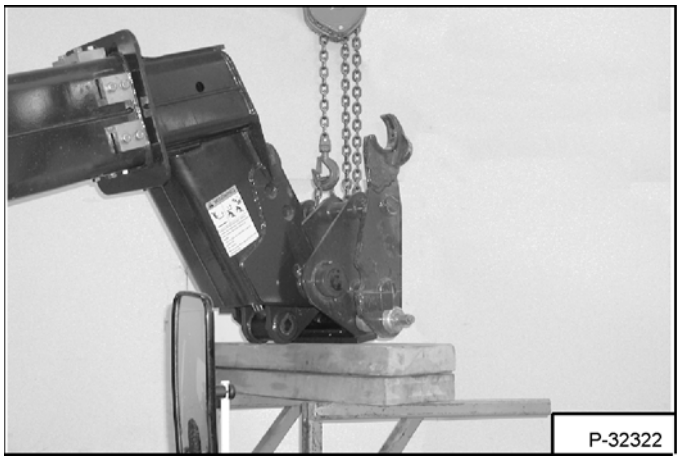


Pull the lever (Item 1) **[Figure 10-20-6]** inside the cab to disengage the latch and close the window.

LIFT CYLINDER

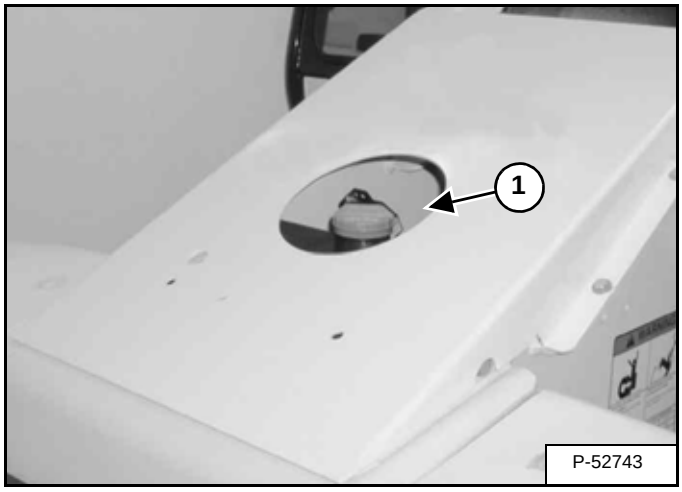
Removal And Installation

Figure 20-20-1



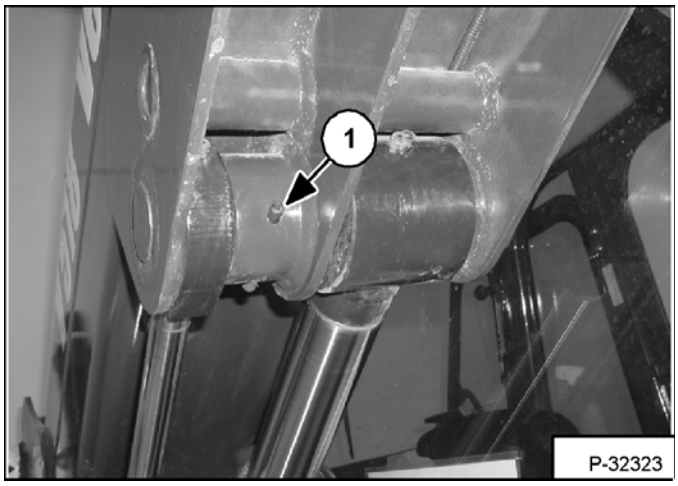
Raise the boom and support on adequate stands **[Figure 20-20-1]**.

Figure 20-20-2



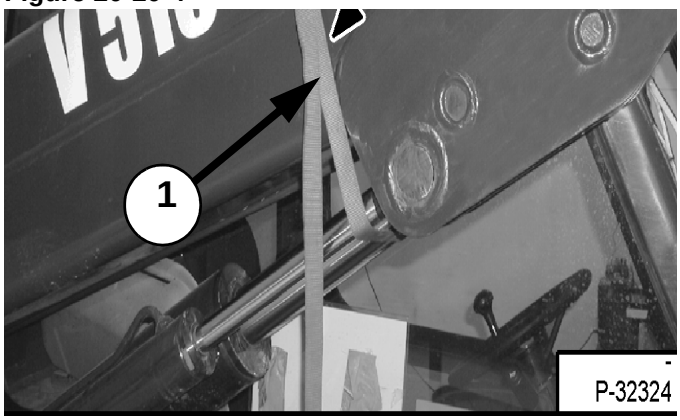
Remove the rear cover (Item 1) **[Figure 20-20-2]** from the Telescopic Handler.

Figure 20-20-3



Remove the rod end pivot pin retainer pin (Item 1) **[Figure 20-20-3]**.

Figure 20-20-4

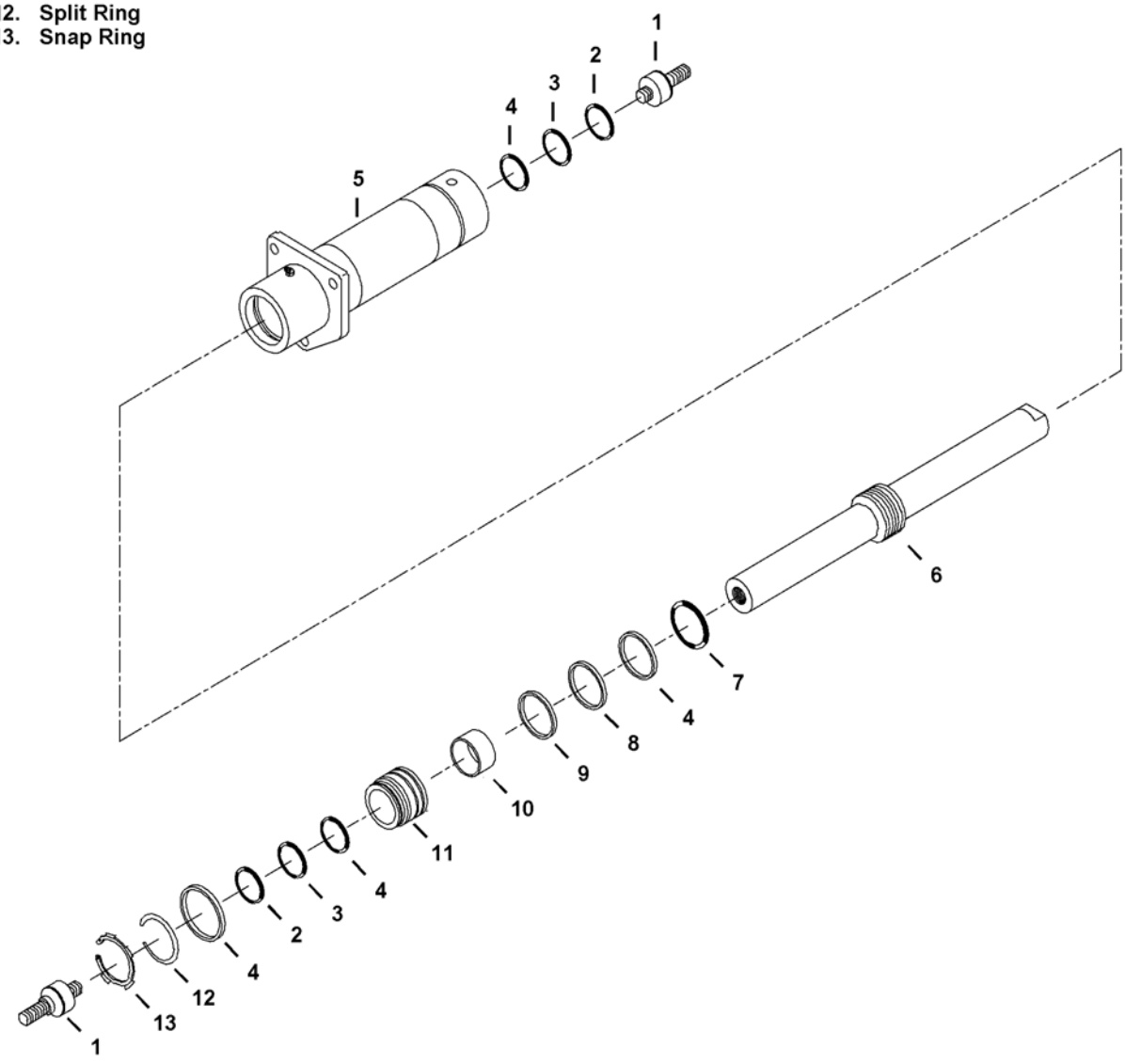


Support both cylinders using a cinch strap (Item 1) **[Figure 20-20-4]**.

STEERING CYLINDER (REAR) (CONT'D)

Parts Identification

1. Swivel End
2. Wiper
3. Backup Washer
4. Seal
5. Housing
6. Rod
7. O-Ring
8. Magnetic Sensor
9. Wear Ring
0. Spacer
11. Head Gland
12. Split Ring
13. Snap Ring

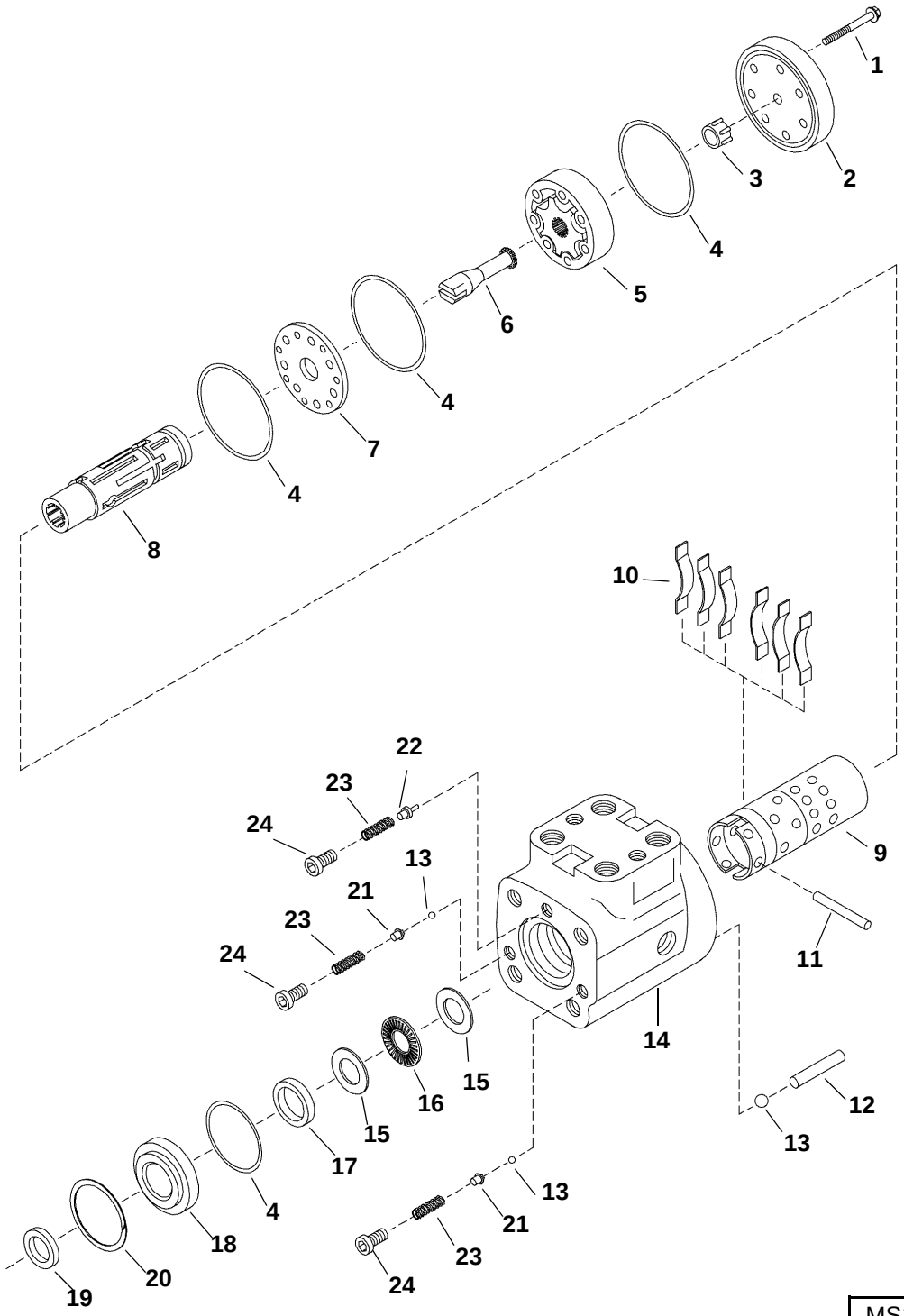


MS-01116

STEERING VALVE (CONT'D)

Parts Identification

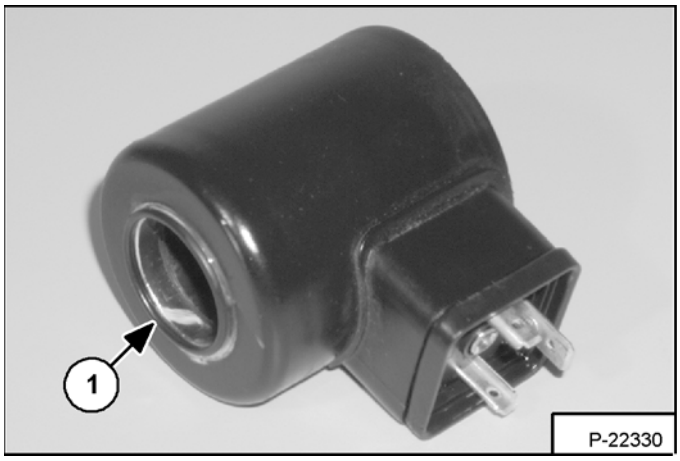
1. Bolt
2. End Cap
3. Spacer Gear
4. O-ring
5. Geroler Assembly
6. Drive Shaft
7. Valve Plate
8. Spool
9. Sleeve
10. Springs
11. Drive Pin
12. Pin
13. Check Ball
14. Housing
15. Thrust Washer
16. Thrust Bearing
17. Quad Ring
18. Seal Housing
19. Seal
20. Retainer Ring
21. Ball Seat
22. Poppet
23. Spring
24. Plug



MS1226

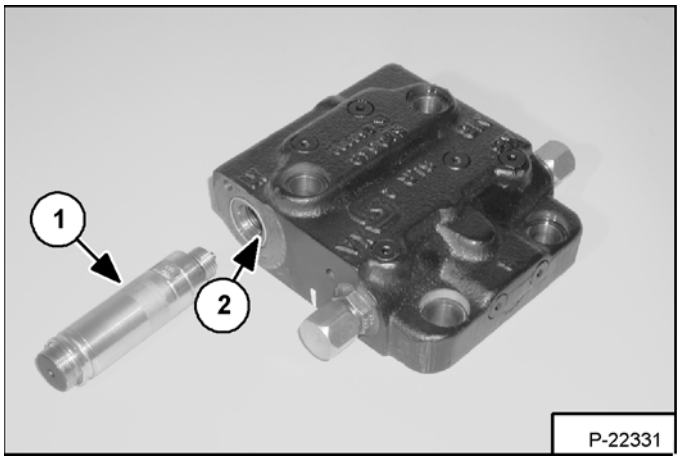
Disassembly (Cont'd)

Figure 30-30-9



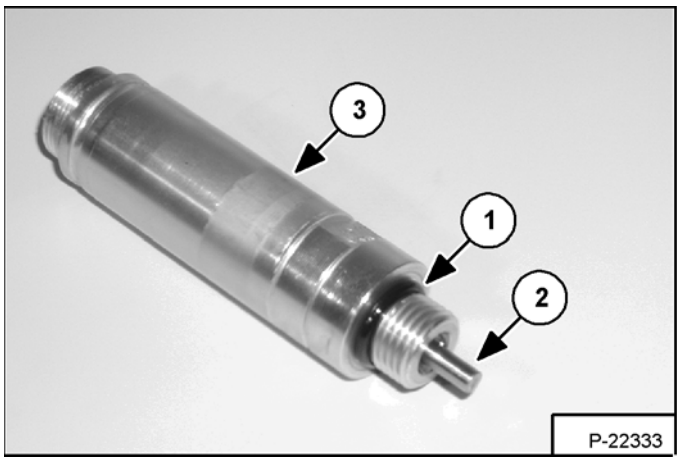
Remove and discard the O-ring (Item 1) **[Figure 30-30-6]** from the solenoid.

Figure 30-30-10



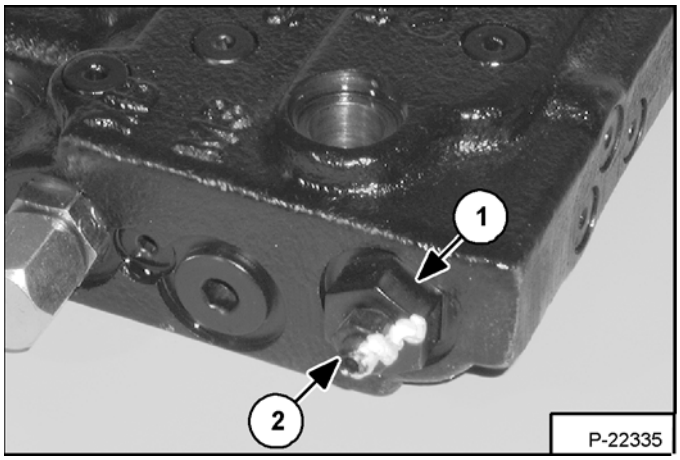
Remove the solenoid shaft (Item 1) and O-ring (Item 2) **[Figure 30-30-7]** from the housing.

Figure 30-30-11



Remove the O-ring (Item 1) and pin (Item 2) from the solenoid shaft (Item 3) **[Figure 30-30-8]**.

Figure 30-30-12



Loosen the large nut (Item 1) **[Figure 30-30-9]** on the compensator valve.

Do not loosen the small nut (Item 2) **[Figure 30-30-9]**.

Pinion Group Assembly

Clean all parts in solvent and dry with compressed air.

Inspect all parts for wear or damage. Replace any worn or damaged parts.

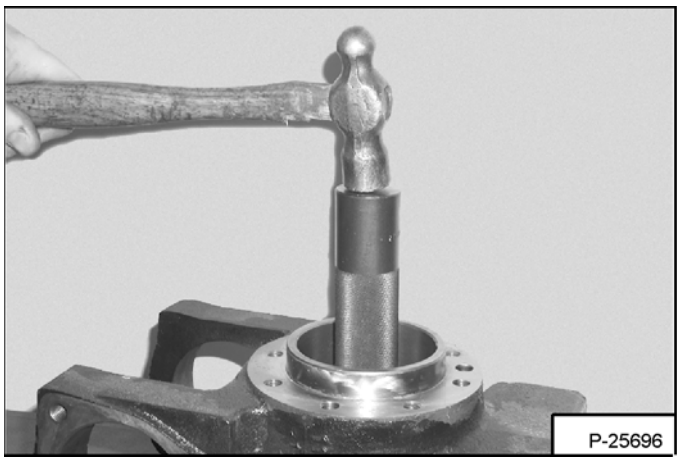
Always install new seals and O-rings. Lubricate all seals and O-rings with clean hydraulic fluid before installation.

IMPORTANT

When repairing hydrostatic and hydraulic systems, clean the work area before disassembly and keep all parts clean. Always use caps and plugs on hoses, tubelines and ports to keep dirt out. Dirt can quickly damage the system.

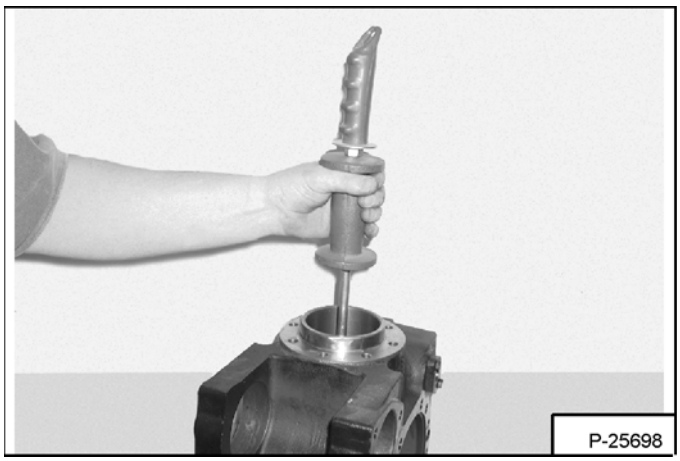
I-2003-0888

Figure 40-20-101



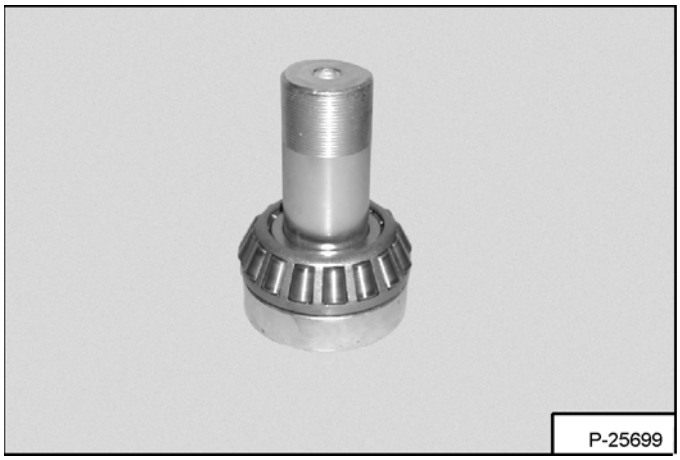
Install the outer race **[Figure 40-20-101]**.

Figure 40-20-102



Install the inner race **[Figure 40-20-102]**.

Figure 40-20-103



Install the bearing (Item 1) **[Figure 40-20-103]** onto the dummy pinion tool CA715040.

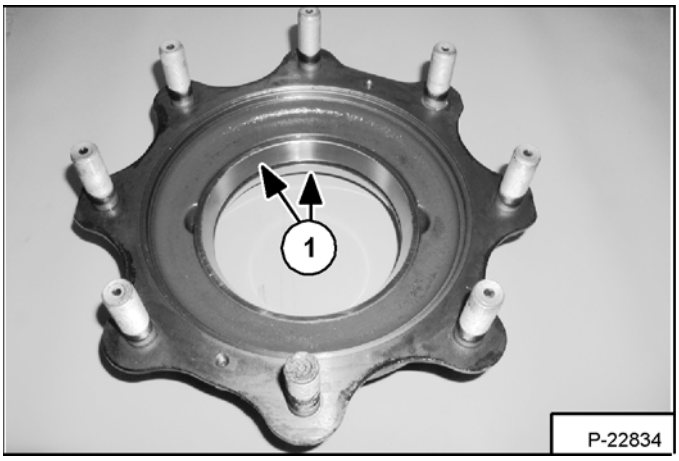
Wheel Hub Assembly

Clean all parts in solvent and dry with compressed air.

Inspect all parts for wear or damage. Replace any worn or damaged parts.

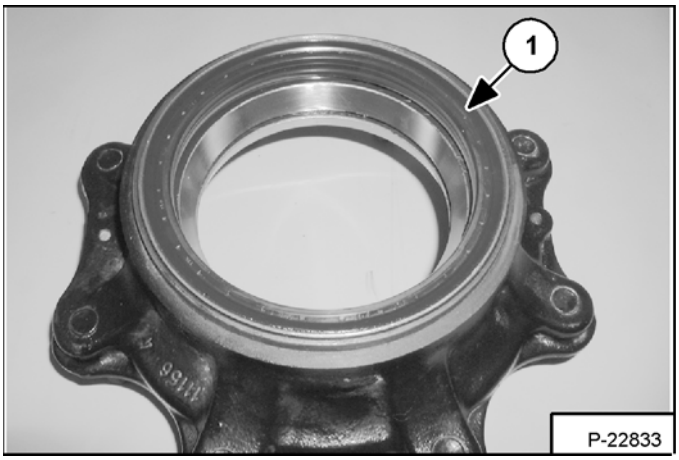
Always install new seals and O-rings. Lubricate all seals and O-rings with clean hydraulic fluid before installation.

Figure 40-20-202



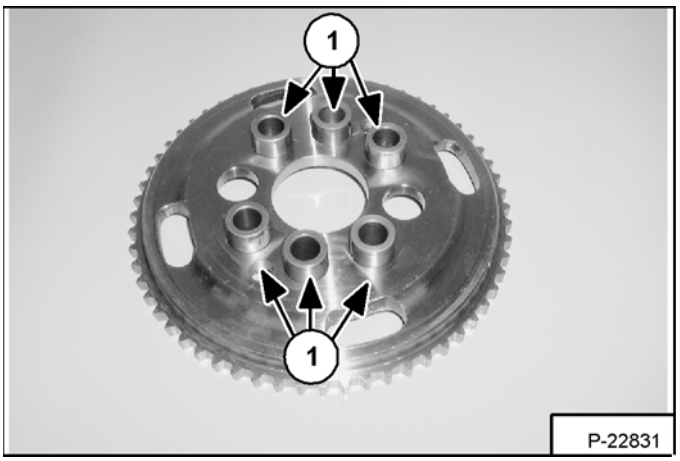
Install both bearing races (Item 1) **[Figure 40-20-202]** into the hub.

Figure 40-20-203



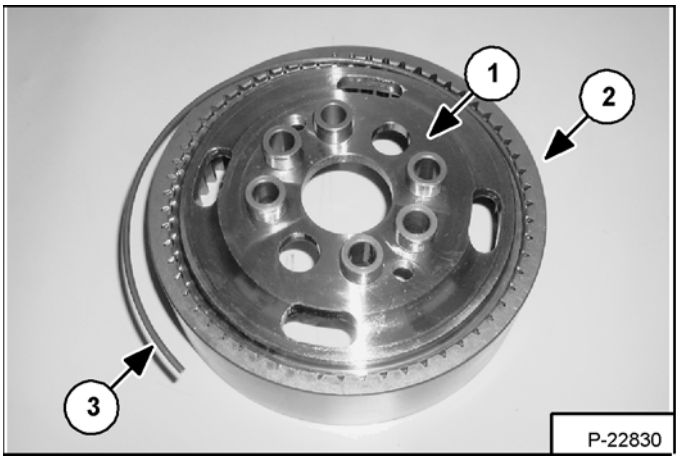
Lightly lubricate the seal (Item 1) **[Figure 40-20-203]** and install into the hub.

Figure 40-20-204



Install the six bushings (Item 1) **[Figure 40-20-204]** into the gear.

Figure 40-20-205

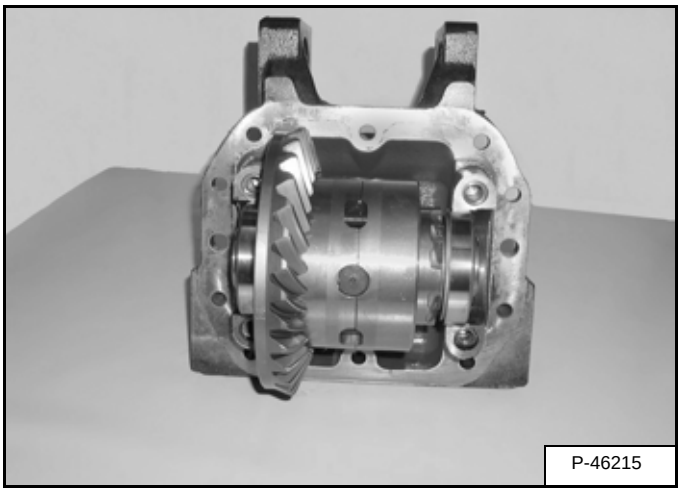


Install the gear (Item 1) into the ring gear (Item 2) **[Figure 40-20-205]**.

Install the retainer ring (Item 3) **[Figure 40-20-205]** into the groove in the ring gear.

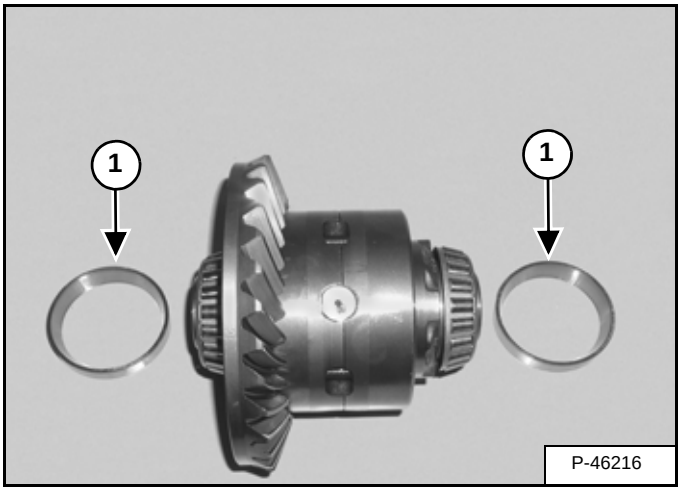
Differential Disassembly (Cont'd)

Figure 40-21-60



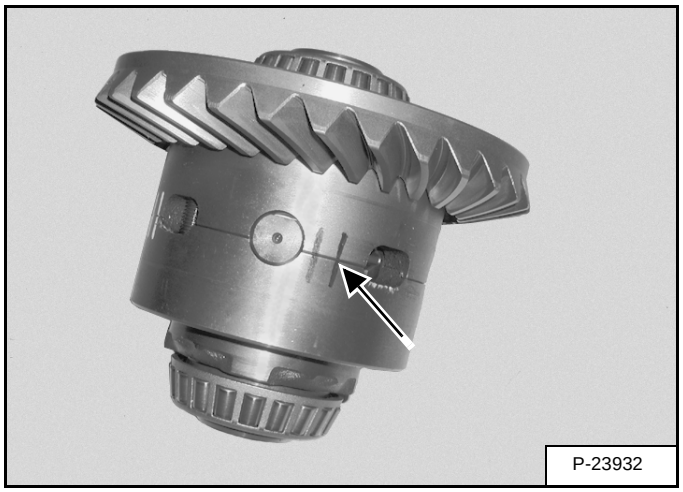
Remove the ring gear assembly **[Figure 40-21-60]**.

Figure 40-21-61



Remove the bearing races (Item 1) **[Figure 40-21-61]**.

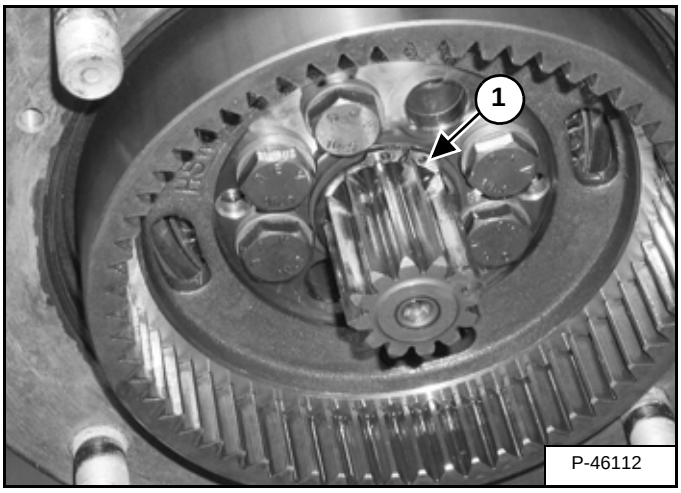
Figure 40-21-62



Mark the housing for correct assembly **[Figure 40-21-62]**.

Wheel Hub Assembly (Cont'd)

Figure 40-21-182



Install the snap ring (Item 1) **[Figure 40-21-182]** onto the axle shaft.

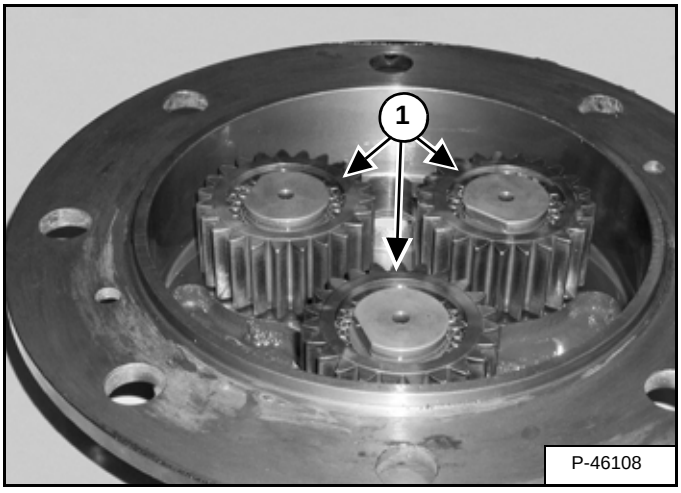
Planetary Carrier Assembly

Clean all parts in solvent and dry with compressed air.

Inspect all parts for wear or damage. Replace any worn or damaged parts.

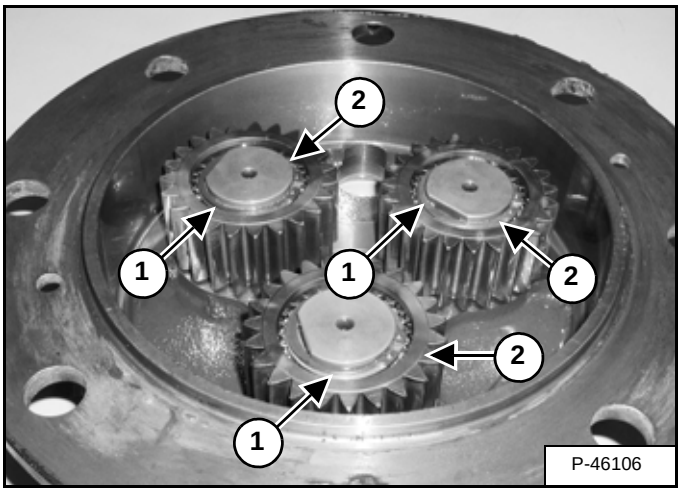
Always install new seals and O-rings. Lubricate all seals and O-rings with clean hydraulic fluid before installation.

Figure 40-21-183



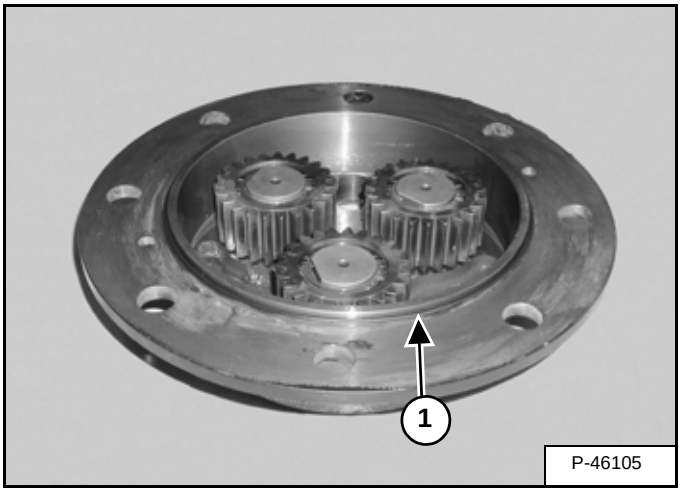
Using grease to hold the needle bearings in position, install the gears onto the shaft **[Figure 40-21-183]**.

Figure 40-21-184



Install the thrust washers (Item 1) and snap rings (Item 2) **[Figure 40-21-184]**.

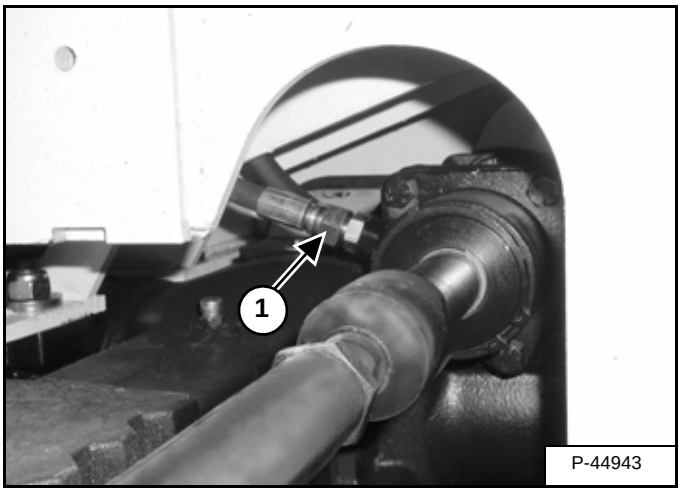
Figure 40-21-185



Install a new O-ring (Item 1) **[Figure 40-21-185]** onto the planetary carrier.

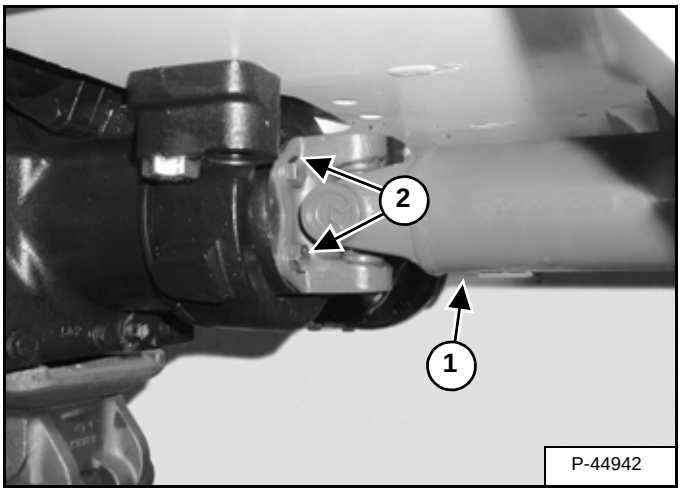
Installation (Cont'd)

Figure 40-90-20



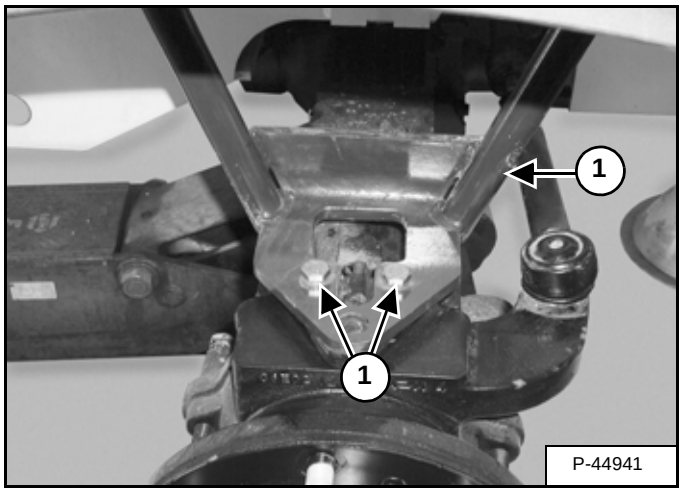
Install the hose (Item 1) **[Figure 40-90-20]** on the steering cylinder

Figure 40-90-21



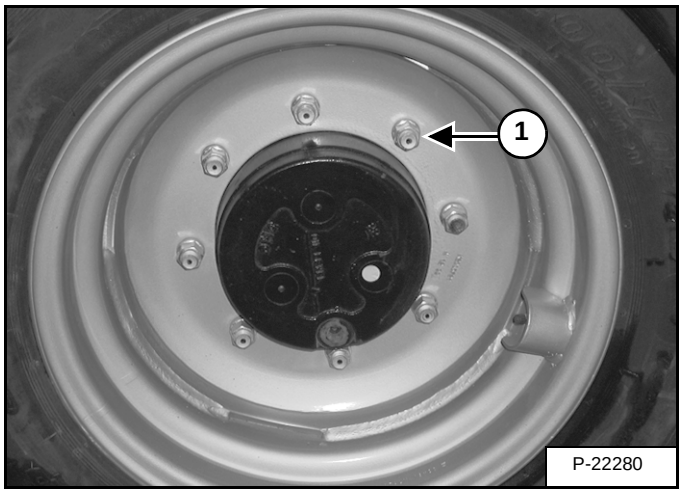
Install the driveshaft (Item 1) with four bolts (Item 2) **[Figure 40-90-21]**. Tighten the bolts to 87 ft.-lbs. (118 Nm) torque.

Figure 40-90-22



Install the rear fenders (Item 1) with two bolts (Item 2) **[Figure 40-90-22]**.

Figure 40-90-23

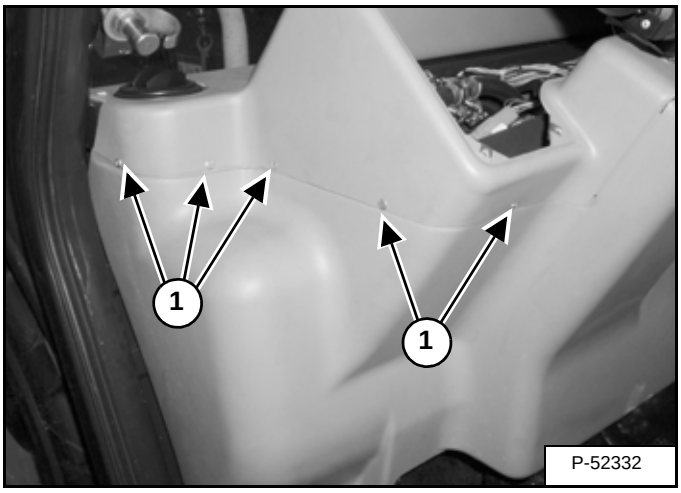


Install the rear tires with eight nuts (Item 1) **[Figure 40-90-23]** and washers.

Tighten the nuts to 221 ft.-lbs. (300 Nm) torque.

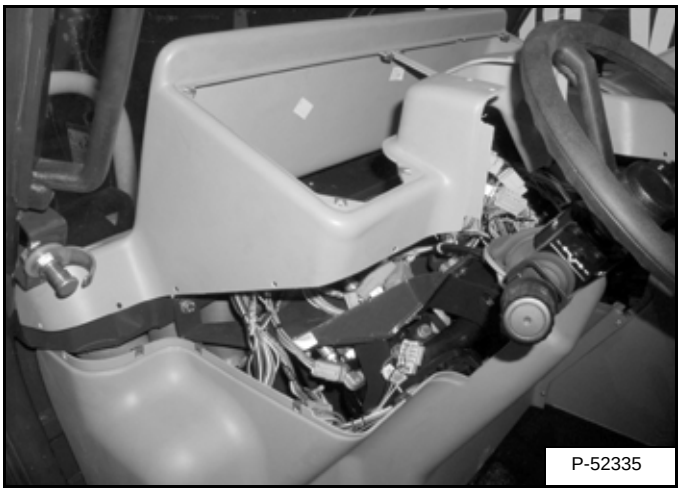
Removal And Installation (Cont'd)

Figure 50-130-5



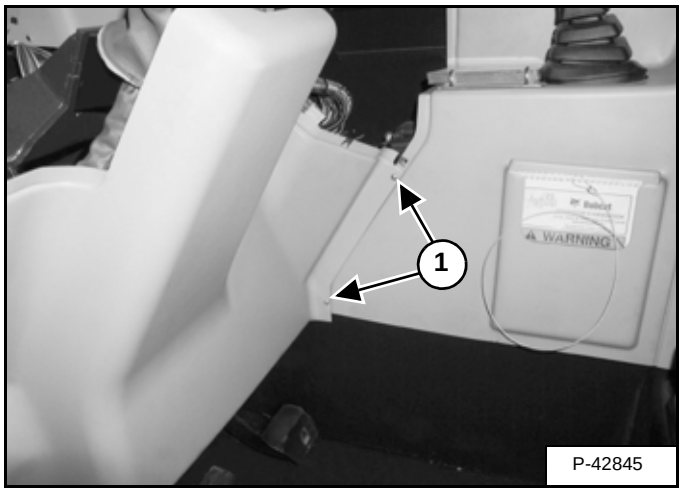
Remove the five screws (Item 1) **[Figure 50-130-5]** from the left side of the dash cover.

Figure 50-130-6



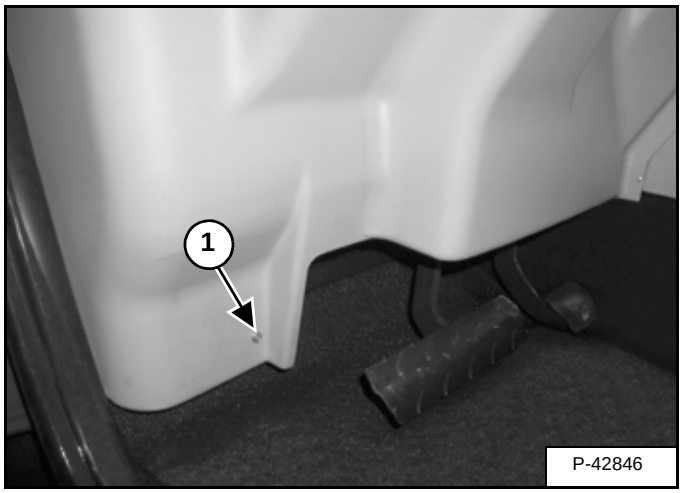
Lift and remove the dash cover **[Figure 50-130-6]**.

Figure 50-130-7



Remove the two screws (Item 1) **[Figure 50-130-7]** from the right side of the column cover.

Figure 50-130-8

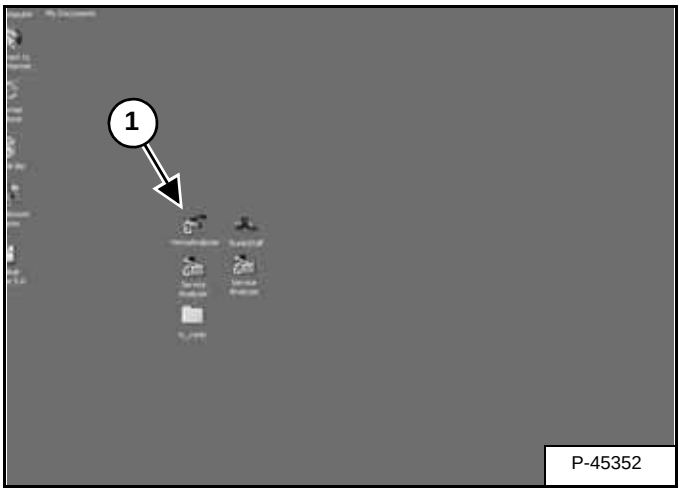


Remove the screw (Item 1) **[Figure 50-130-8]** from the left side of the column cover.

SERVICE SOFTWARE (CONT'D)

Entering The Service Software

Figure 60-160-5



Click the Telehandler icon (Item 1) **[Figure 60-160-5]** to enter the program.

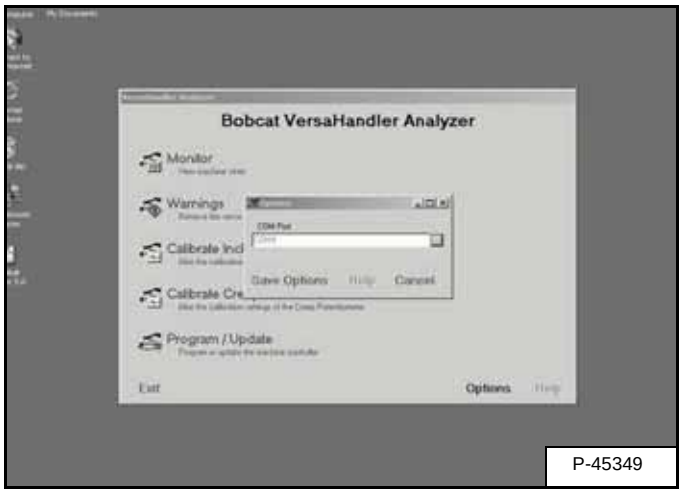
Figure 60-160-6

The option screen will appear when entering the Telehandler service analyzer **[Figure 60-160-6]**. The com port can be changed, if com port 1 is already being used.

Figure 60-160-7

This is the Main Screen of the Telehandler analyzer program **[Figure 60-160-7]**.

Figure 60-160-8



The options icon will take you to the options screen **[Figure 60-160-8]**. The com port can be changed, if com port 1 is already being used.

TEMPERATURE/PRESSURE

Chart

NORMAL EVAPORATOR RANGE	
TEMP F.	**PSIG**
16	15.69
18	17.04
20	18.43
22	19.87
24	21.35
26	22.88
28	24.47
30	26.10
32	27.79
34	29.52
36	31.32
38	33.17
40	35.07
42	37.03
44	39.05
45	40.09
50	45.48
55	51.27
60	57.47
65	64.10
70	71.19
75	78.75
80	86.80
85	95.40
90	104.40
91	106.30
92	108.20

NORMAL CONDENSER RANGE	
TEMP F.	**PSIG**
93	110.20
94	112.10
95	114.10
100	124.30
102	128.50
104	132.90
106	137.30
108	141.90
110	146.50
112	151.30
114	156.10
116	161.10
118	166.10
120	171.30
122	176.60
124	182.00
126	187.50
128	193.10
130	198.90
135	213.70
140	229.40
145	245.80
150	263.00
155	281.10
160	300.10
165	320.10
170	340.80

Evaporator

Pressures represent gas temperatures inside the coil. not the coil surface. For an estimate of the temperature of the air coming off the coil add 8-10 degrees F. to the temperature on the chart.

Condenser

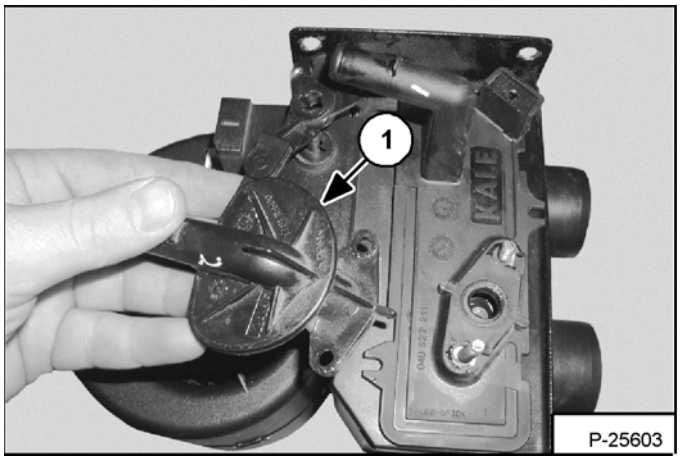
Temperatures are not ambient temperatures but condensing temperatures. Add 40 degrees F. to the ambient temperature to get the condensing temperature and then refer to the pressure chart to see appropriate pressure for ambient temperature.

Example: Ambient Temperature=90 degrees F.
90 degrees F.
+40 degrees F.
130 degrees F. condenser temperature=200 psig

Conditions and pressures will vary from system to system.

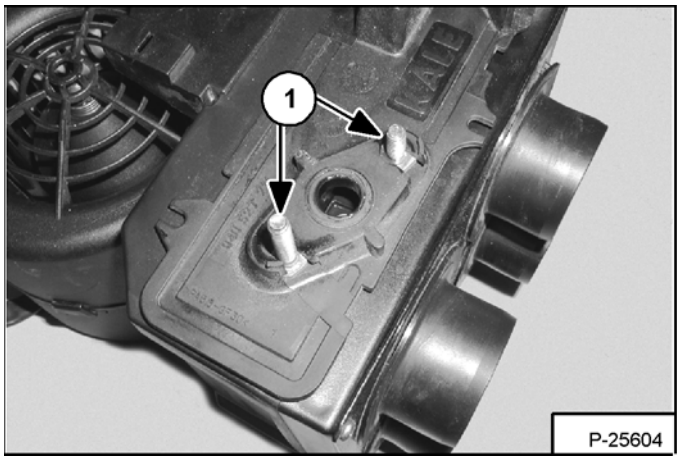
Core Removal And Installation (Cont'd)

Figure 80-170-9



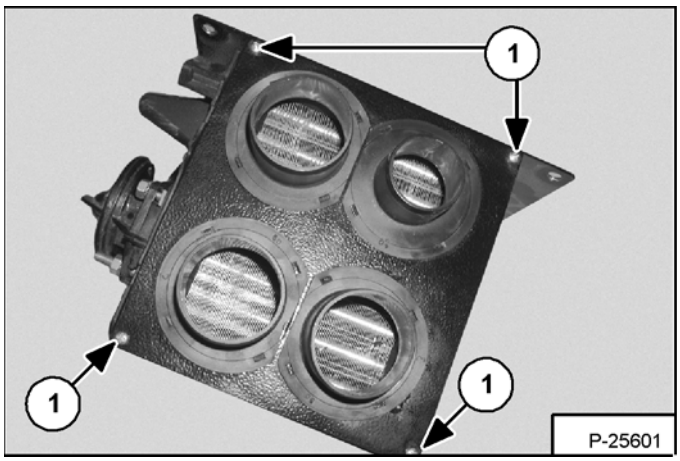
Remove the flange/linkage assembly (Item 1) **[Figure 80-170-9]** from assembly.

Figure 80-170-10



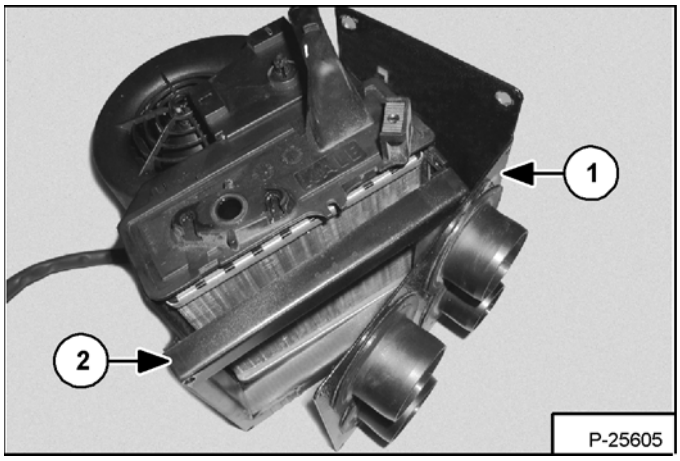
Remove the two bolts (Item 1) **[Figure 80-170-10]** and save for later use.

Figure 80-170-11



Remove the four screws (Item 1) **[Figure 80-170-11]** from the vent bracket.

Figure 80-170-12



Remove the end bracket (Item 1) and spacer (Item 2) **[Figure 80-170-12]** from the assembly.