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</table>
This procedure covers:

- ✓ Removal
- Disassembly
- Special Cleaning

- Inspection/Specification
- Assembly
- Component Test

- Installation
- Adjustments
- Equipment Preparation

**Machine Set-up**
- Machine blocked to prevent movement.
- Screed lowered to a flat surface.
- Catch container for hydraulic fluid (3 qts., 2.8 L).

**Special Tools**
- ✓ None

**Fabricated Tools**
- ✓ None
OMNISCREED II AND SIDE ARM ASSEMBLY

REMOVAL

Step 1:
Disconnect screed electrical cables.
   a. Disconnect Blaw-Kontrol if installed on screed.
      (1) Disconnect Blaw-Kontrol wires from control valves located under the fenders of the front bulkhead.
      (2) Remove all clamps (1) holding the wire assemblies and pull wires out through the rear bulkhead.
      (3) Disconnect power cable from Blaw-Kontrol inside center console.
      (4) Disconnect and unclamp wire to slope sensor (2).
   b. Remove feed sensor if installed.
   c. Cap cable receptacles to prevent dirt from entering.

Step 2:
Disconnect screed lift cylinder at the lower end.
   a. Remove cotter pins.
   b. Drive clevis pin out.

Step 3:
Disconnect side arms from tow points.
   a. Remove clevis pin (1) from side arm cylinder (2).
   b. Remove nut, bolt and front guide roller (3) from side arm.

   c. Store pins in rod end of cylinder.
   b. Start engine and retract screed lift cylinder rods to prevent damage.
   c. Put screed lift cylinder supports in position to keep cylinders from drifting.

IMPORTANT
Make sure tow point cylinder is in mid-position and needle valve closed. Null the screed.
Step 4:
Disconnect screed hydraulic lines.
   a. Disconnect screed hydraulic lines (5) from tractor rear bulkhead.
   b. Mark, cap and plug all fittings and hoses.

Step 5:
Disconnect screed fuel lines.

**WARNING**
Diesel fuel is slippery. Exercise extreme care when disconnecting screed fuel lines from the tractor to avoid accumulation of fuel which could cause personal injury.

**WARNING**
Diesel fuel is flammable. Exercise extreme care when disconnecting screed fuel lines from the tractor to avoid fire.

   a. Disconnect screed hydraulic lines (5) from tractor rear bulkhead.
   b. Mark, cap and plug all fittings and hoses.

Step 6:
Move tractor away from screed.
   a. Move blocks away from tires (tracks).
   b. Start engine.
   c. Drive slowly out of side arms. Spread or raise side arms for tractor clearance as required.

**INSTALLATION**

Install the screed and sidearm assembly by reversing removal procedures.

**NOTE**
OmniScreed II has a lift lug extension (1) between the screed lift lug and the lift cylinder which must be installed on PF-161 wheel driven machines so that the screed can go below grade.

**EQUIPMENT PREPARATION**

Step 1:
Start paver.

Step 2:
Test screed.
   a. Raise and lower screed to verify proper operation of screed lift cylinders and to purge air from system.
   b. With screed lowered, run screed vibrator to check operation and to purge air from system.
   c. Extend and retract screed extensions if equipped, to purge air from system.
This procedure covers:

- Removal
- Disassembly
- Special Cleaning

Inspection/Specification

- Assembly
- Component Test

- Installation
- Adjustments
- Equipment Preparation

**Machine Set-up**
- Machine blocked to prevent movement.
- Screed blocked about 6" (15.2 cm).

**Special Tools**
- Blaw-Knox Hammer
- Blaw-Knox Mandrel Wrench

**Fabricated Tools**
- None
EDGER PLATES AND CUT-OFF SHOES

REMOVAL

Step 1:
Remove the cut-off shoe (1) if installed.

Step 2:
Remove the edger plates.
  a. Remove the guide hardware (2).
  b. Remove the spring hold-down (3) and disconnect two jack chains (4).
  c. Grip the edger plates (5) from the front and slide off.

NOTE
Mounting mandrels have angled slots. The large opening must be facing up to prevent the wedges from jamming.

  d. Drive all the wedge keeper pins into the slots to secure the edger plate assemblies in position.

Step 3:
Remove the edger guide frames.
  a. Remove the three wedge keepers (6) from the slots.
  b. Remove the edger guides (7) from the screed frame.
  c. Remove the three mandrels (8) from the holes, if necessary.

INSTALLATION

Step 1:
Mount the edger guide frames.
  a. Align the three mandrels (8) and three holes of the screed and frames.
  b. Insert the mandrels through the holes until the mandrel slots are fully exposed on the opposite side of the mounting member.
  c. Fasten the edger guide frames (7) on the outer ends of the screed using the upper wedge keeper (6).
Step 2: Install the edger plates.
   a. Slide the edger plates (5) into the edger guide frames from the front.
   b. Secure edger plates with guide hardware (2).
   c. Attach chains (4) to jacks and install spring hold-downs (3).
   d. Install the wear plate (9) if it has been removed or needs to be replaced.

Step 3: Install the cut-off shoe if necessary.
   a. Remove the wear plate (9) from the bottom of the edger plate.
   b. Install the cut-off shoe (1).
SCREED CONTROL BOX ASSEMBLIES

This procedure covers:

✓ Removal
Disassembly
Special Cleaning

Inspection/Specification
Assembly
Component Test

✓ Installation
Adjustments
✓ Equipment Preparation

Machine Set-up
- Battery disconnected.
- Machine blocked to prevent movement.
- Screed lowered to a flat surface.

Special Tools
✓ None

Fabricated Tools
✓ None
SCREED CONTROL BOX ASSEMBLIES

REMOVAL

Step 1:
Turn fuel pump switch to “OFF.”
   a. Lift up lockable cover on screed control box.
   b. Make sure the fuel pump switch (1) on the upper right hand screed control panel is in the “OFF” position.

Step 2:
Remove screed control panel screws (2) and lift panel out of housing.

Step 3:
Remove control panel.
   a. Tag switch terminals and disconnect wires to the switches.
   b. If necessary, remove switches which are to be replaced. Remove locknuts and washers and remove switch from panel.

Step 4:
Remove screed heater fuel valve from the screed control box.
   a. Remove the hose fitting and jam nut (3) on fuel valve (4).
   b. Slide valve out of slot and remove valve.

Step 5:
If necessary, remove screed control box from the screed.
   a. Remove harness clamps and ground bolt (5) in bottom of box.
   b. Disconnect wiring harnesses from all switches.
   c. Loosen strain relief (6) on bottom of box and remove cable (7).
   d. Remove bolts (8) and washers underneath box and lay box (9) over.
   e. (Optional) Disconnect fuel lines (10).

INSTALLATION
Install control box and cables by reversing removal procedures.

NOTE
See electrical section for detailed schematics.

EQUIPMENT PREPARATION

Step 1:
Connect battery.

Step 2:
Test screed controls.
   a. Start engine.
   b. Turn on controls and test operation of all functions.
Screed Mid-Sized Paver/Finishers

HYDRAULICALLY DRIVEN MECHANICAL VIBRATORS

This procedure covers:

- ✔ Removal
- ✔ Disassembly
- ✔ Special Cleaning
- ✔ Inspection/Specification
- ✔ Assembly
- ✔ Component Test
- ✔ Installation
- ✔ Adjustments
- ✔ Equipment Preparation

### Machine Set-up
- Battery disconnected.
- Machine blocked to prevent movement.
- Screed lowered to a flat surface.
- Catch container for hydraulic fluid (3 qts., 2.8 L).
- Top step on screed removed (optional).

### Special Tools
- ✔ None

### Fabricated Tools
- ✔ None
HYDRAULICALLY DRIVEN MECHANICAL VIBRATORS

REMOVAL

Step 1:
Remove vibrator flow control valve.
   a. Disconnect, mark, cap and plug two hydraulic lines and fittings (1).
   b. Remove valve mounting bolts and remove the flow control valve (2).

Step 2:
Remove vibrator motor(s).
   a. Remove eight bolts (3) securing the vibrator cover guard and remove cover guard (4).
   b. Disconnect, mark, cap and plug hydraulic hoses (7) and fittings.
   c. Remove motor mounting bolts (8) from vibrator motor bracket (9).
   d. Remove vibrator motor (10).

   HINT
Remove center crown bar (5) so right-hand cover will come out more easily. Also remove floating beam towing bracket (6), if necessary.

Step 3:
Remove vibrator shafts.
   a. Remove lock wire (11) and remove roll pin (12).
   b. Remove pillow block bolts (13) and remove vibrator shaft assembly.
   c. Remove bearings from shaft, if necessary.

   NOTE
Inner bearings on vibrator shaft come equipped with "dog point" screws. When installing vibrator shafts, pay special attention to the NOTE under the Installation section regarding the use of dog point screws.
INSTALLATION

Step 1:
Install the hydraulically driven mechanical vibrators by reversing the removal procedures.

**NOTE**
Fill all hoses and motor with approved hydraulic oil.

**CAUTION**
Be sure vibrator weights (1) are oriented in the same position on all vibrator shafts.

**NOTE**
When replacing the inner bearing on a vibrator shaft assembly, dog point screws (2) MUST be used in place of standard set screws. Insert the point of the dog point screw into the keyway slot in the shaft, but do not tighten screws against the shaft to allow for frame expansion and contraction.

a. Tighten until a “slip fit” is achieved.
b. Install a lock wire (3) to keep dog point screw in place.
c. Apply “anti-seize” to all shafts at bearings.

f. Mount the vibrator shaft onto the screed frame and tighten cap screws.
g. Align the motor coupling horizontally with the vibrator shaft coupling using a straight edge. Tighten motor hardware.

**NOTE**
Tighten the motor mounting bolts (7) before tightening set screws on the shaft coupling.

h. Loosen two set screws holding the vibrator bearings nearest the motor.
i. Align the vibrator shaft coupling vertically with the motor coupling using a straight edge. Tighten mounting screws.
j. Rotate the coupling 360° while checking for proper alignment.
k. Gap coupling halves 1/32” between openings using a feeler gauge (8). Tighten set screws in the coupling.

Step 2:
Install vibrator shaft coupling:

a. Align the hydraulic motor bracket square with the screed frame.
b. Mount the motor loosely on the mounting bracket.
c. Mount the coupling half (4) flush on the end of motor shaft. Tighten set screw on coupling.
d. Mount the coupling half (5) flush on the end of vibrator shaft. Tighten set screw.
e. Place spider (6) in the motor half of coupling.
NOTE
The center spider in coupling can move slightly with proper gap.

1. Again, rotate coupling to check for proper alignment and free movement of spider.

ADJUSTMENT

Step 1:
Remove covers from vibrators if necessary.

Step 2:
Adjust vibrator eccentric weight.
   a. Loosen set screw (1).
   b. Position eccentric weight (2) to provide desired vibration (see positions below). All weights must have the same orientation.
   c. Tighten set screw (1).

Step 3:
Install covers over vibrators.

EQUIPMENT PREPARATION

Step 1:
Connect battery.

Step 2:
Test screed vibrators.

IMPORTANT
After replacing a component, cycle that circuit several times to move air to the hydraulic tank.

a. Start engine.
b. Turn the vibrator switch on the operator’s control panel to the “ON” position.
c. Adjust the flow control valve on the screed to adjust screed vibration frequency.
This procedure covers:

- ✓ Removal
- ✓ Disassembly
- ✓ Special Cleaning
- Inspection/Specification
- ✓ Assembly
- ✓ Component Test
- ✓ Installation
- ✓ Adjustments
- ✓ Equipment Preparation

**Machine Set-up**
- Battery disconnected.
- Machine blocked to prevent movement.
- Screed lowered to a flat surface.

**Special Tools**
- ✓ None

**Fabricated Tools**
- ✓ None
**MANUAL CROWN ADJUSTING ASSEMBLY**

**REMOVAL**

**IMPORTANT**
*Do not attempt to remove the crown adjusting assembly with the screed supported above ground. Binding of the mechanism and screed plate will occur.*

Step 1:
Turn crown adjusting turnbuckle rearward to remove any existing crown. Visually check screed to make sure it is flat.

Step 2:
Remove the manual crown adjusting assembly.
  a. Remove four large mounting bolts and self-locking nuts (1) from front and rear of assembly.
  b. Break the chain (2) at the master link.
  c. Lift assembly out of machine.

**INSTALLATION**

Step 1:
Install manual crown adjusting assembly and tighten mounting bolts (1) only enough to allow movement of the crown adjusting assembly.

Step 2:
Align front (3) and rear (4) sprockets so chain will run true. Make sure the jam nuts (5) are on the right hand side of both turnbuckles.

Step 3:
Test manual crown adjusting assembly.
  a. Rotate the manual crown turnbuckle forward to increase center crown.
  b. Rotate the manual crown turnbuckle rearward to reduce center crown.
  c. Watch the center crown gauge for the amount of crown being applied.
  d. Use a 10’ straight edge to verify screed is flat at front and rear when gauge is reading zero.
  e. If necessary, remove the sprocket bolts and adjust both turnbuckles independently until the screed is flat.
OPTIONAL POWER CROWN ADJUSTING ASSEMBLY

This procedure covers:

✓ Removal
✓ Disassembly
✓ Special Cleaning
✓ Inspection/Specification
✓ Assembly
✓ Component Test
✓ Installation
✓ Adjustments
✓ Equipment Preparation

**Machine Set-up**
- Machine blocked to prevent movement.
- Screed lowered to a flat surface.
- Catch container for hydraulic fluid (3 qts., 2.8 L).

**Special Tools**
- ✓ None

**Fabricated Tools**
- ✓ None
OPTIONAL POWER CROWN ADJUSTING ASSEMBLY

REMOVAL

IMPORTANT
Do not attempt to remove crown adjusting assembly with the screed supported above ground. Binding of the mechanism and bending of the screed plate will occur.

Step 1:
Remove any existing crown.
   a. Start engine.
   b. Turn power crown switch to the “ON” position.
   c. Turn crown adjusting wheel to remove any existing crown. Visually check screed to make sure it is flat.
   d. Turn off engine and disconnect battery.

Step 2:
Remove power crown adjusting assembly.
   a. Remove cover mounting bolts and remove cover.
   b. Disconnect, mark, cap and plug hydraulic hoses and fittings to torque generator (1).
   c. Remove large mounting bolts and self-locking nuts (2).
   d. Lift assembly out of machine.

Step 2:
Remove and replace the ON-OFF switch, hydraulic hoses and fittings, if necessary.

DISASSEMBLY

Step 1:
Remove torque generator (1) if repairs to this unit or replacement of flange bearings (3) is required. Remove all generator and bearing mounting screws. It is not necessary to break the chains to remove the generator.

INSPECTION

Step 1:
Inspect chains, sprockets and bearings for wear and damage. Replace if necessary.

Step 2:
If the torque generator is not operating properly, repair or replace. See Vendors Publication List in Appendix H-I.
INSTALATION

Step 1:
Install power crown adjusting assembly by reversing the disassembly steps.

NOTE
You may need to use flatwashers to shim on either side of the turnbuckle so the turnbuckle is straight across from one frame to the other frame.

NOTE
Sprockets must be aligned for chains to run true.

NOTE
Sprockets must be “timed” in center of left/right thread travel. Otherwise the screed will bind when crowned.

a. Install four large mounting bolts and self-locking nuts (2).
b. Connect hydraulic hoses.
c. Install the cover and tighten the mounting bolts.

Step 2:
Test power crown adjusting assembly.

b. Turn power switch to the “ON” position.
c. Rotate the power crown handle forward to increase center crown.
d. Rotate the power crown handle rearward to reduce center crown.
e. Watch the center crown gauge for the amount of crown being applied.
f. Use a 10’ straight edge to verify the screed is flat at the front and rear when gauge is reading zero.
g. If necessary, remove the sprocket bolts and adjust both turnbuckles independently until the screed is flat.
SCREED HEATER WITH SPARK IGNITION

This procedure covers:

- ✔ Removal
- ✔ Disassembly
- ✔ Special Cleaning
- ✔ Inspection/Specification
- ✔ Assembly
- ✔ Component Test
- ✔ Installation
- ✔ Adjustments
- ✔ Equipment Preparation

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<td>✔ None</td>
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<tr>
<td>• Machine blocked to prevent movement.</td>
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<tr>
<td>• Screed lowered to a flat surface.</td>
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<tr>
<td>• Vibrator covers and vibrator shafts removed.</td>
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![Diagram of Screed Heater with Spark Ignition](image)
SCREED HEATER WITH SPARK IGNITION REMOVAL

Step 1:
Disconnect fuel line (1) as shown.

Step 2:
Disconnect the ground wire (2) and blue positive wire (3) from the burner.

Step 3:
If the igniter (4) needs service or adjustment, disassemble the screed heater assembly with spark ignition "Latest Design" as required per the following illustration. Remove and replace faulty components.

HINT
Suspend the vibrator shaft (5) behind the screed heater unit as shown to remove the screed heater assembly, if necessary.
INSPECTION

Step 1:
Check for plugged fuel filter (1) or contaminated check valve (2).

Step 2:
Check for plugged nozzle (3).

Step 3:
Check for bent or carboned igniter electrodes (4) and correct relationship to the nozzle. (See Fig. 4 for the appropriate gap and location dimensions.) Adjust or replace if necessary.

Step 4:
Check for burned out burner housing (5) and furnace.

Step 5:
Check the blower (6) and motor (7) for proper function.

INSTALLATION

Reinstall the screed heater with spark ignition by reversing the removal steps.

EQUIPMENT PREPARATION

Step 1:
Connect battery.

Step 2:
Test screed heaters.

⚠️ WARNING ⚠️
Never fuel machine while burners are operating.

⚠️ WARNING ⚠️
Never use wash down spray while burners are operating.
IGNITOR ASSEMBLY (FOR SCREED HEATERS WITH SPARK IGNITION)

DISASSEMBLY

Disassemble ignition assembly as required (after testing) to replace faulty components.

INSPECTION AND TESTING

Step 1:
Check relay (1) for resistance between terminals A and D. Resistance should be approximately 70 ohms.

Resistance of large coil (2) from positive to negative terminal should be approximately 5 ohms. Resistance from center terminal to positive or negative terminals should be approximately 14 K ohms.
Screed Mid-Sized Paver/Finishers

This procedure covers:

✓ Removal
Disassembly
Special Cleaning

✓ Inspection/Specification
Assembly
Component Test

✓ Installation
Adjustments
✓ Equipment Preparation

Machine Set-up
- Battery disconnected.
- Machine blocked to prevent movement.
- Screed lowered to a flat surface.
- Vibrator covers and vibrator shafts removed.

Special Tools
✓ None

Fabricated Tools
✓ None
SCREED HEATER WITH GLOW PLUG IGNITION

REMOVAL

Disassemble the screed heater assembly with glow plug ignition “Early Design” as required per the following illustration to replace worn or faulty components.

INSPECTION

Step 1:
Check for plugged fuel filter (1) or contaminated check valve (2). Replace if necessary.

Step 2:
Check for plugged nozzle (3). Replace if necessary.

Step 3:
Connect battery or turn battery master disconnect switch ON.

Step 4:
Check for carboned or inadequate heating of glow plug (4). Replace if necessary.

Step 5:
Check for burned out burner housing (5) and furnace (6). Replace if necessary.

INSTALLATION

To install the screed heater with glow plug ignition, reverse the removal procedures per the preceding illustration.

EQUIPMENT PREPARATION

Step 1:
Test screed heaters.

WARNING

Never fuel machine while burners are operating.

WARNING

Never use wash down spray while burners are operating.
This procedure covers:

- Removal
- Disassembly
- Special Cleaning
- Inspection/Specification
- Assembly
- Component Test
- Installation
- Adjustments
- Equipment Preparation

**Machine Set-up**
- Battery disconnected.
- Machine blocked to prevent movement.
- Screed lowered to a flat surface.
- Extensions fully extended.

**Special Tools**
- None

**Fabricated Tools**
- None
MAIN STRIKE-OFF PLATES

REMOVAL

Step 1:
Remove slope sensor and beam. (Refer to the “Slope Sensor and Beam” procedure.)

Step 2:
Remove side arms. (Refer to the “Side Arms” procedure.)

Step 3:
Remove the strike-off adjuster assembly.
   a. Remove the studs (1) with nuts and washers.
   b. Remove the gauge plate (2).
   c. Remove the lower roll pin (3) only from the lower collar (4).
   d. Attach an overhead hoist to the strike-off plate (5) for support.
   e. Turn the adjuster screw (6) upward using the ratchet handle (7) until the screw clears the support block (8).
   f. Lift the strike-off plate away from the screed.
   g. Disassemble the adjuster screw, top collar and ratchet handle from the strike-off, if necessary. Remove the snap ring (9) from the ratchet handle and slide off the adjuster screw and key.

INSPECTION

Check for wear or damage along bottom edge of strike-off assembly. Repair or replace as required.

INSTALLATION

Step 1:
Install strike-off assembly.

Step 2:
Install strike-off adjuster assembly.

Step 3:
Install all other removed components.

Step 4:
Install slope sensor and beam by reversing the removal process.

EQUIPMENT PREPARATION

Connect battery.
This procedure covers:

- Removal
- Disassembly
- Special Cleaning
- Inspection/Specification
- Assembly
- Component Test
- Installation
- Adjustments
- Equipment Preparation

**Machine Set-up**
- Battery disconnected.
- Machine blocked to prevent movement.
- Screed lowered to a flat surface.
- Vibrator covers and vibrator shafts removed.
- Screed burner assembly removed.

**Special Tools**
- ✔ None

**Fabricated Tools**
- ✔ None
MAIN SCREED PLATE

REMOVAL

Step 1:
Obtain access to the screed plate nuts and special washers.
   a. Remove the following items as required to gain access to screed plate mounting hardware:
      • Screed heaters.
      • Vibrator covers.
   b. Adjust center crown so screed is flat.

Step 2:
Tack weld a plate across both main frames so the frames stay the same distance apart after the main screed plate is removed.

Step 3:
Remove the screed plate.

   NOTE
   Asphalt may have become lodged between the screed frame and the screed plate. Soften the asphalt with a solvent and remove it with a chisel or pick.

   a. Remove all screed plate nuts (1) and special washers.
   b. Connect battery.
   c. Raise screed. Screed plate (2) should remain on the ground.

INSTALLATION

Step 1:
Install screed plate.
   a. Place screed plate under screed frame. Lower screed onto screed plate.
   b. Shim, if necessary, to keep plate flat.
   c. Install special washers and screed plate nuts. Torque nuts to 35 ft./lbs. lubricated.

   IMPORTANT
   Replace all nuts and special washers when replacing screed plate.

Step 2:
Remove the tack weld plate from the screed frame.

Step 3:
Install other removed components.

EQUIPMENT PREPARATION

Step 1:
Connect battery.

Step 2:
Test screed burners and vibrators for proper operation.

INSPECTION

Step 1:
Inspect screed plate for excessive wear, flatness and damage. Replace if necessary.

Step 2:
Inspect screed frames for cracks and damage. Frame should be kept flat and clean.
This procedure covers:

- **Removal**
  - ✔ Disassembly
  - Special Cleaning

- **Inspection/Specification**
  - ✔ Assembly
  - Component Test

- **Installation**
  - Adjustments
  - Equipment Preparation

---

**Machine Set-up**
- Battery disconnected.
- Machine blocked to prevent movement.
- Screed lowered to a flat surface.
- Catch container for hydraulic fluid (3 qts., 2.8 L).

**Special Tools**
- ✔ None

**Fabricated Tools**
- ✔ None
EXTENSION CONTROL VALVE

DISASSEMBLY

Step 1:
Remove step and hand rail assembly (optional).

Step 2:
Disconnect, cap and tag two wire assemblies and six hydraulic hoses at the control valve (1).

Step 3:
Remove four bolts from the mounting bracket (2).

Step 4:
Remove the control valve from the mounting bracket.

NOTE
Refer to the hydraulic section about hydraulic problems and details concerning the control valve.

ASSEMBLY

Reassemble the extension control valve by reversing the disassembly steps.
This procedure covers:

- **Removal**
- **Disassembly**
- **Special Cleaning**
- **Inspection/Specification**
- **Assembly**
- **Component Test**
- **Installation**
- **Adjustments**
- **Equipment Preparation**

### Machine Set-up
- Battery disconnected.
- Machine blocked to prevent movement.
- Screed removed from machine (preferable).
- Screed fully extended and lowered to a flat surface.
- Catch container for hydraulic fluid (3 qts., 2.8 L).
- Edger plate assembly removed.
- Main strike-off(s) removed.

### Special Tools:
- **None**

### Fabricated Tools:
- **None**

---

### NOTE

The procedure to follow illustrates the removal of the right hand extendible section. The procedure for removing the left hand extendible section is the same, except the step and hand rail assembly must be removed for access to the mounting hardware.

### NOTE

For left hand side, left hand strike-off must be removed. For right hand side, both strike-offs must be removed.
EXTENDIBLE SECTION SUPPORT AND EXTENSION ARRANGEMENT

REMOVAL

Step 1: Release extendible section from main screed.
   a. Remove screws (1) from mounting studs.
   b. Remove slope indicator bar (2).
   c. Remove nuts (3) from the mounting studs.

Step 2: Pry the extendible section forward from the main until the studs clear the main frame holes.

Step 3: Disconnect the hydraulic extension cylinder hoses. Cap, plug and tag hoses and fittings for correct location.

Step 4: Disconnect the two extension vibrator hoses at the main frame. Cap, plug and tag hoses and fittings for correct location.

Step 5: Disassemble the slope adjusting arrangement.
   a. Remove the ball screw assembly (4).
      1. Remove the nut on top of the slope ratchet handle (5) and the set screw (6a) in the trunnion (6).
      2. Unscrew the ball screw (4) downward to remove.
      3. Remove the ratchet handle.
      4. Inspect parts and replace worn items.

   CAUTION
   Do not remove the bolt (4a) at the bottom of the ball screw assembly (4) as internal bearings may spill out from the assembly.

Step 6: Remove the height adjusting assembly.
   a. Remove the height ratchet handle (9) and take the four bolts out on the forward side.
   b. Disassemble the inner (10) and outer (11) height adjusting screw assemblies and bearings (12).
   c. Inspect and replace worn parts.
   d. Clean threads and apply anti-seize.
Step 7: Remove retaining bar (13) to access trunnion (6).

Step 8: Inspect height bar (14) and slope bar (15) for damage.

DISASSEMBLY OF EXTENDIBLE SECTIONS

Step 1: Remove hydraulic cylinder cover.

NOTE
This can be performed before or after the saddle assembly is removed.

a. Remove eight mounting bolts (four from top and four from bottom).
b. Remove the cover (1).

Step 2: Remove saddle assembly.

a. Extend the cylinder approximately 2" by prying on saddle assembly for access to the cylinder pin.

b. Remove the cylinder pin (2).

NOTE
Clear the heat transfer holes (3) on the extendible section and main.

c. Remove four allen head screws out of end of slide shafts (4) and two bolts out of opposite end of slide shaft.
d. Retract the cylinder using a prybar (5).
e. Remove the saddle assembly using straps and a chain hoist or other lifting device.

Step 3: Disassemble as required to replace faulty components. If disassembly of the vibrator components is necessary, refer to the reassembly steps for the main screed section vibrators for details.
INSPECTION

Step 1:
Make the following inspections:
   a. Inspect the slide tubes (1) and bushings (2) for scarring and wear.
   b. Inspect the extension cylinder (3) for function and leaks.
   c. Inspect hydraulic tubes (4), hoses and fittings for damage or leaks.
   d. Inspect mounting pins (5) for damage and wear.
   e. Inspect saddle (6) for bend damage.

Step 2:
Replace or repair the necessary parts.

ASSEMBLY/INSTALLATION

Install the extendible screed section by reversing disassembly and removal procedures.

NOTE
Fill extension cylinder with approved hydraulic fluid.

HINT
Clean the rust and grease from shafts; align the shaft holes horizontally with the extension frame holes before wedging the shaft back into the frame.

EQUIPMENT PREPARATION

Step 1:
Connect battery.

Step 2:
Test the extension function for smooth, unrestricted operation.
This procedure covers:

- ✓ Removal
- ✓ Disassembly
- ✓ Special Cleaning

Inspection/Specification

- ✓ Installation
- ✓ Adjustments
- ✓ Equipment Preparation

**Machine Set-up**
- Extendible section removed from main.
- Machine blocked to prevent movement.

**Special Tools:**
- ✓ None

**Fabricated Tools:**
- ✓ None
EXTENDIBLE SECTION SCREED PLATES

REMOVAL

Step 1:
Remove the heat chamber access cover (1).

Step 2:
Remove the screed plate mounting nuts (2) and special washers.

Step 3:
Remove the screed plate.

Step 4:
Inspect the interior baffle(s) (3; not visible in photo). If necessary, burn out the interior baffle(s) and weld new baffle(s) in place.

Step 5:
Inspect and replace the end wear plate (4) if necessary.

Step 6:
Inspect and replace wiper end plate (5) if necessary.

Step 7:
Inspect frames for flatness and cracks. Repair as needed.

INSTALLATION

Step 1:
Install the extendible section screed plates by reversing the removal procedures.
   a. Remove blocking.
   b. Place the screed plate under the elevated screed frame.
   c. Lower the screed frame onto the screed plate. Shim, if needed, to keep screed plate flat.
   d. Install special washers and screed plate nuts. Torque nuts to 35 ft./lbs. lubricated.

   **IMPORTANT**
   Replace all nuts and special washers when changing the screed plate.

Step 2:
Install all other removed components.

Step 3:
Reinstall extendible section on main.

EQUIPMENT PREPARATION

Test the extension function for smooth, unrestricted operation.
This procedure covers:

- ✔ Removal
- ✔ Disassembly
- ✔ Special Cleaning
- ✔ Inspection/Specification
- ✔ Assembly
- ✔ Component Test
- ✔ Installation
- ✔ Adjustments
- ✔ Equipment Preparation

**Machine Set-up**
- Machine blocked to prevent movement.
- Screed lowered to a flat surface.

**Special Tools**
- ✔ None

**Fabricated Tools**
- ✔ None
SCREED DEPTH CRANKS
(early design)

REMOVAL

Step 1:
Remove crank arm assembly.
   a. Position crank arm in nulled position and remove crank screw and nut.
   b. Remove crank arm and spring.

Step 2:
Remove adjusting screw and sleeve.
   a. Remove bolt (1) attaching sleeve (2) to side arm.
   b. Remove roll pin (3) from U-joint (4).
   c. Lift screw (5) and sleeve from screed.

Step 3:
Remove shaft and bearings.
   a. Remove bearing nut (7) and washers (8).
   b. Remove internal shaft (6) with bearing cones and cups (9).

Step 4:
Inspect all parts for wear. Replace worn parts.

INSTALLATION

Install screed depth cranks by reversing removal procedures.

   NOTE
   Tighten firmly so there is no play in the bearings.

   NOTE
   Lock nut must be locked into position.

EQUIPMENT PREPARATION

Step 1:
Change screed angle of attack several times.

   NOTE
   Adjust both sides equally to prevent twisting of the screed.
SCREED DEPTH CRANKS (Early Design)

REMOVAL

Step 1:
Remove crank arm assembly.
   a. Position crank arm in nulled position and remove crank nut (1).
   b. Remove crank arm and large washer (2).

Step 2:
Remove sleeve, adjusting screw and U-joint.
   a. Remove bolt attaching sleeve (3) to side arm.
   b. Remove pin (4).
   c. Lift screw (5) and sleeve from machine.
   d. Disassemble screw from inside of sleeve.
   e. Remove pin (6).
   f. Remove U-joint (7).
   g. Disassemble U-joint.

Step 3:
Remove shaft and bearings.
   a. Remove locknut (8), star washer (9) and washers (10 & 11).
   b. Remove shaft (12).
   c. Remove cones and cups (13).

Step 4:
Inspect all parts for wear. Replace worn parts.

INSTALLATION

Install screed depth cranks by reversing removal procedures.

NOTE
Tighten firmly so there is no play in the bearings.

NOTE
Lock nut must be locked into position.

EQUIPMENT PREPARATION

Step 1:
Change screed angle of attack several times.

NOTE
Adjust both sides equally to prevent twisting of the screed.
Appendix H-I

Vendor Component Publications Listing

The following component publications are available from the Blaw-Knox Technical Publications Department free of charge to authorized Blaw-Knox dealers.

To order, please provide the following information:
- Dealer Name
- Name of Service Manager
- Dealer Address
- Dealer Phone & Fax Numbers
- Machine Model & Serial Numbers

Send your request to:
Blaw-Knox
Construction Equipment Corp.
750 Broadway Avenue East
Mattoon, IL 61938-4600 U.S.A.

<table>
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<th>COMPONENT</th>
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<tr>
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