

Electric Hand Reworking Kit No. 48703

For Use on 1935 Terraplanes and Hudsons

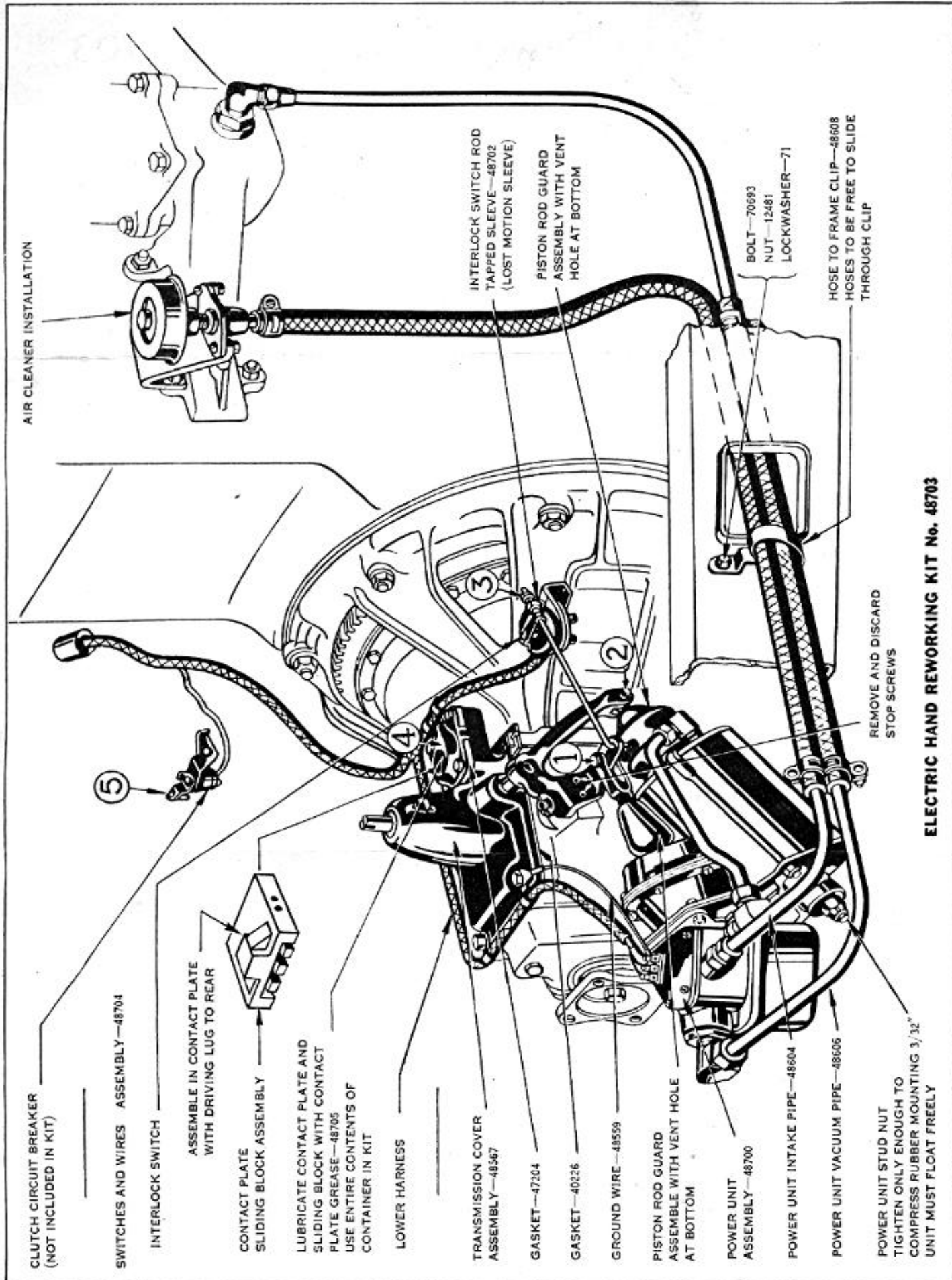
BILL OF MATERIALS

No. Used	Part No.	Part Name
1	48700	Power Unit Assembly
1	48604	Power Unit Intake Pipe Assembly
1	48335	Power Unit Vacuum Pipe Elbow
1	48606	Power Unit Vacuum Pipe Assembly
1	48608	Hose Line to Frame Clip
1	70693	Bolt
1	12481	Nut
1	71	Lockwasher
1	48704	Switches and Wires Assembly
1	47204	Gasket Contact Plate to Transmission Cover
1	48702	Interlock Switch Rod Tapped Sleeve (Lost motion sleeve)
1	48559	Ground Wire Assembly
1	48567	Transmission Cover Assembly
1	40226	Transmission Cover to Transmission Housing Gasket
1	48705	Contact Plate Grease (One ounce container)

INSTALLATION INSTRUCTIONS

Disassembling Operations

1. Remove front floor mat.
2. Remove floor panel over transmission.
3. Remove diaphragm cylinder rod clevis pin
(1).
4. Remove power cylinder rod clevis pin
(2).
5. Remove vacuum hose and air cleaner hose at power unit.
6. Remove screw from power cylinder valve housing cover plate, which holds lower harness clip, and remove three wires from power unit junction block.
7. Remove power unit mounting stud nut and remove power unit from car.
8. Remove screw holding red wire to clutch circuit breaker.
9. Loosen clamp on steering column and separate multiple jack.
10. Remove lost motion sleeve from interlock switch operating rod. (Discard sleeve but retain lock nut.)
11. Remove two bolts holding interlock switch to clutch bell housing.
12. Remove two stop screws with lock nuts from cross shift lever and discard.
13. Remove four cap screws holding transmission cover and remove cover and lower harness.



AIR CLEANER INSTALLATION

CLUTCH CIRCUIT BREAKER
(NOT INCLUDED IN KIT)

SWITCHES AND WIRES ASSEMBLY—48704

INTERLOCK SWITCH

ASSEMBLY IN CONTACT PLATE
WITH DRIVING LUG TO REAR

CONTACT PLATE
SLIDING BLOCK ASSEMBLY

LUBRICATE CONTACT PLATE AND
SLIDING BLOCK WITH CONTACT
PLATE GREASE—48705
USE ENTIRE CONTENTS OF
CONTAINER IN KIT

LOWER HARNESS

TRANSMISSION COVER
ASSEMBLY—48567

GASKET—47204

GASKET—40226

GROUND WIRE—48559

PISTON ROD GUARD
ASSEMBLY WITH VENT HOLE
AT BOTTOM

POWER UNIT
ASSEMBLY—48700

POWER UNIT INTAKE PIPE—48604

POWER UNIT VACUUM PIPE—48606

POWER UNIT STUD NUT
TIGHTEN ONLY ENOUGH TO
COMPRESS RUBBER MOUNTING $\frac{3}{32}$ "
UNIT MUST FLOAT FREELY

INTERLOCK SWITCH ROD
TAPPED SLEEVE—48702
(LOST MOTION SLEEVE)

PISTON ROD GUARD
ASSEMBLY WITH VENT
HOLE AT BOTTOM

BOLT—70693
NUT—12481
LOCKWASHER—71

HOSE TO FRAME CLIP—48608
HOSES TO BE FREE TO SLIDE
THROUGH CLIP

REMOVE AND DISCARD
STOP SCREWS

ELECTRIC HAND REWORKING KIT No. 48703

Installation Operations

1. Put gasket No. 40226 on transmission
put transmission cover No. 48567 in place
and secure with two front cap screws only.
2. Lubricate contact plate rails sliding block
and driving rod in transmission cover with
entire contents of Container No. 48705
(included in kit).
3. Place Gasket No. 47204 on underside of
contact plate and install contact plate on
transmission cover.
NOTE—Be sure driving lug on sliding
block is to the rear (toward transmission
control tower).
Do not force sliding block lug into driving
rod notch by putting the transmission in
neutral and centering the sliding block on
the contact plate the engagement can be
made without force.
4. Secure contact plate with four capscrews,
also securing clip on lower harness with
left rear capscrew.
NOTE Do not tighten screws as an adjust-
ment must be made after the installation
is completed.
5. Secure lower harness clip to left rear trans-
mission cover cap screw.
6. Secure lower harness clip and large terminal
of ground wire No. 48559 to right rear
transmission cap screw.
7. Install interlock switch on clutch bell
housing.
8. Put interlock switch rod through interlock
switch lever trunnion block and thread
lost motion sleeve No. 48702 on rod with
sleeve entering trunnion block.
NOTE—Adjustment to be made later.
9. Connect multiple jack at steering column
and tighten clamp.
10. Attach red wire from lower harness to
terminal on clutch circuit breaker.

11. Attach vacuum hose pipe No. 48606 and air
cleaner pipe No. 48a604 to power unit.
12. Put power unit No. 48700 in place, securing with
stud nut to transmission bracket.
NOTE—Power unit must be free to float.
Tighten nut only sufficiently to compress rubber
mountings a total of 3/32". This brings the back
of the nut approximately flush with the end of
the mounting stud.
13. Withdraw air cleaner hose from frame and .cut
5" off length. In replacing hose, pass through
same opening in Frame X-member that vac-
uum line passes through.
14. Lead both hoses through clip No. 48608 and
secure clip to upper hole in frame just back of
opening through which hoses pass.
NOTE Hoses must be free to slide in clip.
15. Attach both hoses with hose clamps to Power
Unit pipes.
16. Secure small terminal of ground wire No.
48559 to left front screw in power unit valve
housing cover.

Adjustments

(Numbers in this section refer to numbers on
Diagram.)

- (1) Shift the transmission into high gear and adjust
the diaphragm rod so that the rod must be
pushed back 1/4" before the clevis pin can be
inserted. Insert clevis pin and cotter key—
tighten lock nut. Be accurate --improper ad-
justment will restrict the movement of the dia-
phragm cylinder.
NOTE—Turn the rod guard so that the drain
hole is down.
- (2) With the transmission still in high gear, adjust the
power cylinder rod so that it must be pushed
backward 14" from its extreme forward position to
permit installation of the clevis pin.

Insert the clevis pin and cotter pin. Tighten lock nut. Be sure the drain holes in the rod guard are at the bottom. Be accurate—Improper adjustment of the rod length will restrict piston movement and complete engagement of the gears will not be obtained. (3) With the transmission still in high gear, push the interlock switch lever backward, then turn the lost motion sleeve lock nut to move the lever forward until the pointer on the lever has moved back exactly in line with the mark between the letters S and H on the switch cover. Turn the lost motion sleeve down against the lock nut. Tighten lock nut securely. Recheck the position of the pointer after shifting the transmission into low and back to high gear manually.

- (4) Connect the terminals of the lower harness test lamp (Part of Test Kit No. 47898) to the power unit terminals of the lower harness. Yellow wire with black tracer to test terminal marked "YB"—white wire to test terminal marked "W," and yellow wire to test terminal marked "Y." Attach test lamp ground clip to chassis frame of car.

With ignition "on" clutch pedal depressed Electric Hand Selector in neutral and transmission in neutral, move the manual shift lever forward until lamp YB of the test kit lights, then backward until lamp Y of the test kit lights. If the movement from neutral to light each lamp is not equal, move contact plate forward or backward as necessary to equalize the necessary movement in both directions and then tighten the four cap screws in the contact plate securely. Disconnect the test lamp and connect the lower harness wires to the power unit terminal. Yellow wire with black tracer to terminal "YB," White wire to

terminal marked "W," Yellow wire to terminal marked "Y."

NOTE—Terminal markings are stamped on cover beside junction block. (5) Check the adjustment of the clutch circuit breaker to see that the pointer is in line with the arrow on the circuit breaker housing when the clutch is fully engaged. Start the engine with the clutch fully disengaged. Move the selector lever to the low position to engage low gear. Allow the clutch to engage very slowly with the engine running at idle speed. If the car begins to move before the cross shift is released (indicated by a click in the cross shift linkage when the clutch circuit breaker opens the circuit), readjust the clutch circuit breaker, moving the pointer slightly ($\frac{3}{32}$ " at a time) back of the arrow. If the circuit breaker opens as indicated by the click in the cross shift linkage before the engine speed is affected slightly by the clutch beginning to engage—readjust the circuit breaker, moving the pointer ahead of the arrow ($\frac{1}{32}$ " at a time).

If the circuit breaker opens too soon, as the clutch is being engaged, the gears will not be meshed, should the gear teeth meet end to end when the gears are moved for engagement.

If the circuit breaker does not open soon enough as the clutch is being engaged, it will be closed too soon, as the clutch is being disengaged and on a pre-selected shift the gears will be shifted with the clutch still engaged, causing gears to clash. Make this adjustment carefully.

Be sure the lower harness is held close to the transmission and cannot chafe by contact with the floor of the body. Re-install the floor panel and front floor mat.